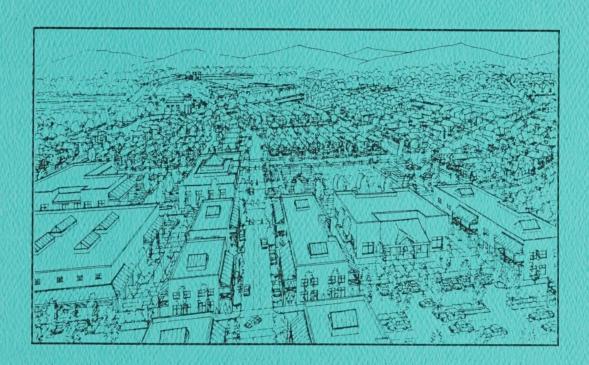
Merced Villages

INSTITUTE OF MONOTONICAL STUDIES CHEENTY

APR 26 1993

UNIVERSITY OF CALIFORNIA

DESIGN GUIDELINES



Prepared for the

City of Merced
Planning and Community Development Department

by

Calthorpe Associates

Economic and Planning Systems and Fehr & Peers

October 1991

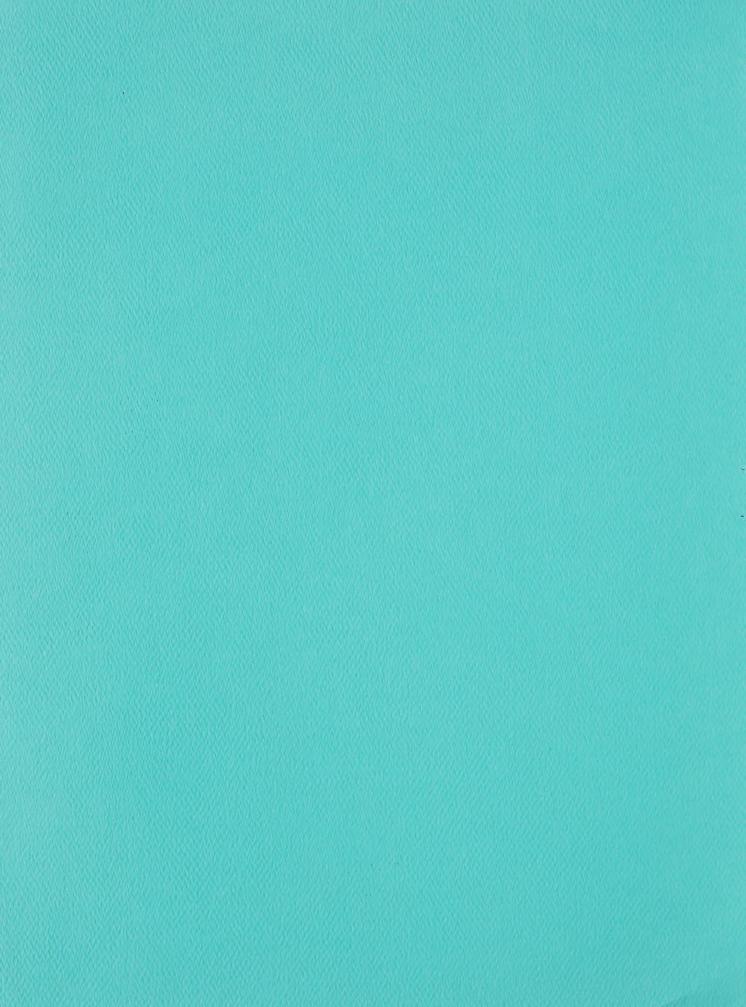


TABLE OF CONTENTS

A. INTROD	UCTION	
1. Overview	w .	1
2. Goals an	d Guiding Principles	2
3. Conceptu	al Plan Features	6
4. Organiza	ation of the Design Guidelines	19
B. DESIGN	GUIDELINES	
1. Definitio	ns	. 20
Guideline 1A. Guideline 1B. Guideline 1C. Guideline 1D. Guideline 1E. Guideline 1F.	VILLAGES CORE COMMERCIAL AREAS VILLAGE RESIDENTIAL AREAS SURROUNDING AREAS OPEN SPACE, PARKS AND PLAZAS OTHER USES	20 21 22 23 24 25
2. General (Criteria	26
Guideline 2A. Guideline 2B. Guideline 2C. Guideline 2D.	DISTRIBUTION OF VILLAGES VILLAGE SIZE COORDINATED PLANNING PHASING	26 27 28 29
3. Street an	d Circulation System	30
Guideline 3A. Guideline 3B. Guideline 3C. Guideline 3D. Guideline 3E. Guideline 3F. Guideline 3G. Guideline 3H. Guideline 3I. Guideline 3J. Guideline 3J. Guideline 3K. Guideline 3M.	STREET PATTERNS MULTIPLE ROUTES ARTERIAL STREETS ARTERIAL INTERSECTION SPACING CONNECTOR STREETS TRANSITWAYS COMMERCIAL STREETS LOCAL STREETS ALLEYS CONNECTOR AND LOCAL STREET INTERSECTIONS ON-STREET PARKING STREET VISTAS	30 31 32 33 34 36 37 38 39 40 41
Guideline 3N	STREET TREES	43



4. Pedestri	an and Bicycle System	44
Guideline 4A. Guideline 4B. Guideline 4C. Guideline 4D. Guideline 4E. Guideline 4F.	PEDESTRIAN ROUTES CONNECTIONS TO THE CORE AREA AND TRANSIT STOP SIDEWALKS BIKEWAYS BIKE PARKING ARTERIAL CROSSINGS	44 45 46 47 48
5. Transit	System	50
Guideline 5A. Guideline 5B. Guideline 5C. Guideline 5D. Guideline 5E.	TRANSIT NETWORK LOCATION OF TRANSIT STOPS TRANSIT STOP FACILITIES STREET CROSSINGS TO TRANSIT STOPS PARK AND RIDE LOTS	50 51 52 53 54
6. Parking	Requirements and Configuration	55
Guideline 6A. Guideline 6B. Guideline 6C. Guideline 6D.	LOCATION OF PARKING LOTS SIZE OF SURFACE PARKING LOTS JOINT USE PARKING PARKING LOT LANDSCAPING	55 56 57 58
7. General	Building Character	59
Guideline 7A. Guideline 7B. Guideline 7C. Guideline 7D.	BUILDING ORIENTATION INTENSITIES AND DENSITIES ARCHITECTURAL CHARACTER LANDSCAPING	59 60 61 62
8. Commer	cial Intensities, Siting and Design	63
Guideline 8A. Guideline 8B. Guideline 8C. Guideline 8D. Guideline 8E. Guideline 8F. Guideline 8G. Guideline 8H.	CORE COMMERCIAL AREAS CORE COMMERCIAL INTENSITIES OFFICE AND OFFICE COMMERCIAL INTENSITIES TRAVEL COMMERCIAL AND LIGHT INDUSTRIAL INTENSITIES CORE COMMERCIAL CONFIGURATION COMMERCIAL BUILDING SETBACKS COMMERCIAL BUILDING FACADES COMMERCIAL BUILDING HEIGHTS	63 64 65 66 67 69 70 71
Guideline 8I. Guideline 8J.	COMMERCIAL BUILDING ENTRIES UPPER STORY USES IN CORE COMMERCIAL AREAS	72 73

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9. Residential Densities, Siting and Design		74
Guideline 9A.	RESIDENTIAL MIX	74
Guideline 9B.	RESIDENTIAL DENSITIES	75
Guideline 9C.	SINGLE-FAMILY HOUSING TYPES	76
Guideline 9D.	ANCILLARY UNITS	77
Guideline 9E.	MULTI-FAMILY HOUSING TYPES	78
Guideline 9F.	RESIDENTIAL BUILDING SETBACKS	80
Guideline 9G.	RESIDENTIAL BUILDING HEIGHTS	81
Guideline 9H.	RESIDENTIAL BUILDING FACADES	82
Guideline 9I.	RESIDENTIAL BUILDING ENTRIES	83
Guideline 9J.	RESIDENTIAL GARAGES	84
10. Public a	nd Semi-Public Siting and Design	85
Guideline 10A.	PUBLIC AND SEMI-PUBLIC USES	85
Guideline 10B.	COMMUNITY SERVICES	86
Guideline 10C.	PUBLIC SCHOOLS	87
Guideline 10D.	DAY CARE	88
Guideline 10E.	QUASI-PUBLIC USES	89
Guideline 10F.	UTILITIES	90
11. Open Spi	ace, Parks and Plazas	91
Guideline 11A.	OPEN SPACE NETWORK	91
Guideline 11B.	GREENWAYS	92
Guideline 11C.	PARK AND PLAZA DESIGN	93
Guideline 11D.	COMMUNITY PARKS	94
Guideline 11E.	VILLAGE PARKS	95
Guideline 11F.	SECONDARY AREA NEIGHBORHOOD PARKS	96
Guideline 11G.	PARK AND PLAZA LANDSCAPING	97
Guideline 11H.	NATURAL FEATURES AND SENSITIVE HABITAT	S 98

A. INTRODUCTION

1. Overview

The Design Guidelines and Merced Villages Conceptual Plan establish a vision for the Merced Village Concept Plan for an 8,000-acre area expected to contain most growth for the next 20 years, north of Merced. The following Design Guidelines seek to ensure quality, transit- and pedestrian-oriented development by providing a framework to guide the character, extent and arrangement of future development in the planning area. These Guidelines provide clear direction while promoting variety and maintaining flexibility; conventional patterns of development are permitted under these Design Guidelines with relatively minor alterations. The Guidelines recommend intensities, densities, configurations, and design characteristics intended to create high quality, diverse, and livable communities by reducing reliance on the automobile and by making walking, bicycling and transit-use convenient and enjoyable.

The Design Guidelines are intended to be used in conjunction with the Conceptual Land Use Plan, the Circulation Diagram, the Transit Diagram, and Open Space Network Diagram. These documents identify the recommended location and extent of future land uses and development features. The Design Guidelines, Conceptual Plan and Diagrams are intended to guide future growth, but are not binding in themselves. They are to be used by landowners, developers and City agencies when setting forth development plans, planning for public facilities and framing future changes to the General Plan and zoning ordinances.

The Design Guidelines and Conceptual Plan were developed after a year-long public process, and incorporate input from the City Council, City Planning Commission and staff, interested public agencies, transportation and economic experts, property owners and concerned citizens. This process included an exploration of several alternatives that refined the pattern of linear, northward growth proposed in "Scenario IV," the preferred alternative in "Merced 2030: How Should We Grow?" Compact, pedestrian-oriented, mixed-use "Villages" were fundamental components in these alternatives. In addition, the alternatives sought to protect sensitive habitats, maintain large rural residential areas, provide major shopping opportunities, meet school and park requirements, create a network of trails and open space, and establish transit service with the potential for an extension to the proposed University of California campus. Review and refinement of these alternatives lead to development of the Conceptual Plan, which is intended to guide growth north of Merced for the next 20-years.

The Design Guidelines follows a summary introduction that includes: Goals and Guiding Principles, Key Features of the Conceptual Plan, and the Organization of the Design Guidelines.

2. Goals and Guiding Principles

Merced has been extremely fortunate that growth has generally clustered around Downtown and resulted in a relatively compact urban form. The City is currently characterized by attractive neighborhoods, relatively little traffic congestion, quality public facilities and services, a solid economy and affordable family housing.

As "How Should We Grow?" determined, projected growth over the next 40 years could drastically change the quality and character of the community if developed under current planning regulations. As Merced grows, its economy is expected to diversify and a wider range of employers and employees will locate in the City. The Merced County Association of Governments projects that Merced's population will reach nearly 135,000 by the year 2010.

Many other central California cities with similar growth pressures are finding it difficult to maintain the qualities that historically made their communities livable and unique. These cities are experiencing traffic congestion, air pollution, and scarcity of affordable housing, in part due to reliance upon development types that lead to urban sprawl.

Basic Goals

The Village Concept is a strategy to accommodate projected growth, while maintaining Merced's present quality of life and allowing for continued economic vitality. The strategy recognizes that reliance upon typical patterns of low density suburban development will generate the multi-faceted problems other communities are facing and that new forms of suburban development are needed during the next 40 years. Thus, the Village Concept seeks to promote the following basic goals:

- Create pedestrian-oriented environments to encourage pedestrian travel and to reduce reliance on the automobile.
- Link land use with proposed transit routes of expanded bus service as well as a potential light rail system.
- Reduce reliance on the automobile by providing alternative travel modes and by minimizing the number of vehiclemiles traveled for common trips.
- Foster compact and efficient development patterns.
- Complement existing retail and employment areas in the City with appropriate land use and transit patterns.
- Provide a diversity of housing types.
- Distribute public facilities throughout the study area to serve all residents.

• Create a sense of community by providing retail and public facilities at the center of compact Villages.

Summary of Guiding Principles

To achieve these basic goals, several principles guided development of the Conceptual Plan and are summarized here:

General Principle:

- Relate to the goals of "Scenario IV" in "Merced 2030: How Should We Grow?".
- Utilize the land use program identified in the "Opportunity and Constraints Analysis and Village Programming Recommendations" report (February 1991).
- Provide a diversity of housing types by programming a feasible ratio of medium density to low density housing.
- Allow existing planned industrial, business, and commercial areas outside of growth area to generate the majority of local new employment and absorb large comparison shopping opportunities.
- Associate schools and neighborhood parks with each other and with Villages and special site features.
- Respect environmental constraints.
- Maintain rural residential east of Gardner-Parsons.
- Respond to existing ownership patterns when locating Villages.

Circulation:

- Create a transit-oriented development pattern, able to be served by autos, but not intended to be reliant on thoroughfare travel.
- Develop M Street as a transitway with Village Centers at three transit stops.
- Establish a pedestrian, bike, and open space network taking advantage of environmentally constrained areas, power line easements and the Yosemite Valley Railroad rights-of-way.
- Allow residents to get to a Village Center without traveling along an arterial street.
- Link public facilities to open space and circulation networks.
- Allow for transit and road systems to serve potential University of California campus.

Commercial Centers:

- Locate Community and Neighborhood Centers, with their grocery stores, a minimum of 1 mile apart and central to the various subareas within growth area.
- Ensure that Convenience Centers have self-supporting market area provided by surrounding Village Residential areas.

- Provide comparison shopping opportunities within the Comparison Center to meet approximately 50% of the comparison retail demand generated by the growth area's residents.
- Avoid Core Commercial areas that front onto north-south arterials that may become expressways.
- Avoid commercial areas at intersections between arterials.
- Provide Office-Commercial areas for flexibility in commercial development throughout growth area.
- Locate major transit stops at commercial centers.

The Village Concept

The fundamental building block for the Conceptual Plan and Design Guidelines is the Village, a compact, mixed-use district that will accommodate projected growth, maintain Merced's present quality of life and ensure its continued economic vitality. Villages achieve these goals by encouraging pedestrian and transit travel, and by minimizing single-use, low density developments that generate traffic congestion, air pollution, a scarcity of affordable housing, monotonous landscapes and poor utilization of environmental and land resources.

It is important to note that the Conceptual Plan takes the typical elements of urban growth-retail centers, single family and multifamily housing, roads, and public services--and reorganizes them to form a more efficient and pedestrian-oriented development pattern. In Villages, medium density housing, Core Commercial uses, and public facilities are concentrated within easy walking distance of transit service. In addition, Office or Office-Commercial uses are located immediately across from the larger Core Commercial areas. Consequently, the Villages are more human-scaled and communityoriented than typical commercial strips and residential subdivisions. Residents can walk to shop, to work, or to ride transit. Workers in or near the Village can walk for local errands, to have lunch or to use parks and recreation facilities. By locating transit stops near Core Commercial areas, shopping can occur to and from work. By providing a compact mixture of land uses, approximately 60 percent of daily trips can be accommodated on foot. Nevertheless, the street system will fully accommodate those who wish to drive or need to drive for major purchases such as weekly grocery shopping.

Centrally-located public uses, such as post offices, libraries, civic centers, day care, and neighborhood parks are also an important component of the Village because they provide convenient community services and meeting places, as well as support local stores.

Less compact Surrounding Areas surround the Villages and contain lower density housing, auto-oriented uses, schools, and open space. Surrounding Areas are tied to the Villages by a local network of connector streets so that arterials and thoroughfares are not relied upon for local travel, thereby reducing demand on these roads and providing safe paths for pedestrians and bicyclists.

Thus, the Village Concept provides a formula for affordable communities. Compact, mixed-use Villages are affordable to the environment because they require efficient use of land, help to preserve open space and agriculture, and maintain air quality. They are affordable for the diverse households moving to Merced because they offer a variety of housing types, at various costs and densities, and in locations well served by transit and shopping opportunities. They are affordable to businesses seeking to relocate because their workforce can be freed of the gridlock and high housing costs typical in other California regions. And, Villages are affordable to the public taxpayer because Village infrastructure is efficient, streets are safe, and public amenities are well-used.

3. Conceptual Plan Features

Land Use Program

The design and land use program for the Conceptual Land Use Plan (Figure 1) is based on analysis of market and growth trends, circulation systems, and existing land uses and environmental factors. (See "Opportunities and Constraints Analysis and Village Programming Recommendations" report, February 1991, for further discussion.)

The potential build-out population of the Conceptual Plan is estimated at approximately 73,900 (Table 1) Figures are not adjusted for lotting inefficiencies or environmental constraints such as wetlands, which require future site-specific analysis and may reduce developability.

Table 1: Program Summary¹

Land Uses Commercial Uses	Approximate A	rea
Core Commercial	70 acres	
Travel Commercial	20 acres	
Office	40 acres	
Office-Commercial	5 acres	
Light Industrial	110 acres	
Residential		
Village	580 acres	(5,800 units)
Secondary	3,500 acres	(17,050 units)
Rural ²	2,200 acres	(2,200 units)
Open Space/Parks	700 acres	
Schools	240 acres	
Arterials/Transitway	400 acres	

Total Site Area 8,000 acres(Population 73,900 residents)

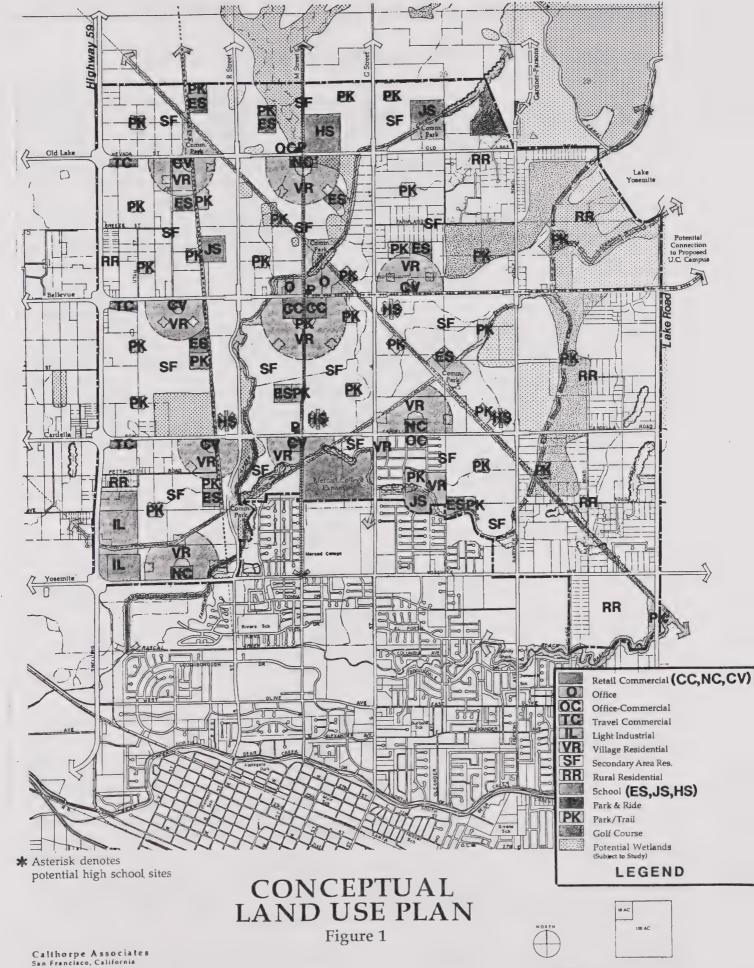
Villages

The Conceptual Land Use Plan locates three Villages along the "M" Street Transitway: a small Village with a Convenience Center Core to the south of Cardella, the major Comparison Center just south of Bellevue Road, and a Neighborhood Centered Village to the north of Old Lake Road. The locations of other Villages maintain a good distribution of retail centers and locate adequate amounts of accessible secondary areas around each Village.

The Villages require an average density ranging from a minimum of 10 to a maximum of 15 dwelling units per gross acre. Densities within this range support transit and retail centers, and create a more walkable environment. The Design Guidelines set criteria for the location, size, and mix of uses in each Village. The boundaries of these Villages are flexible as long as their overall size and distance from the transit stop are maintained.

^{1.} Numbers may not add due to rounding.

^{2.} An average rural density of 1 dwelling unit per acre is assumed; while the County may permit 3 du/ac in certain circumstances, existing parcelization patterns, wetlands and other constraints suggest fewer units at build-out.



Calthorpe Associates
San Francisco, California
Economic and Planning System
Februard Peers

Retail and Office Uses and Market Analysis

Core Commercial retail centers are the focus of each Village. A market analysis was performed by Economic Planning Systems to determine the scale, number and type of retail centers. To determine the amount of retail demand that would be generated by the residents in the growth area and how it will be distributee, the economic analysis considered: the number and type of anticipated residences, estimated housing prices and household incomes, typical retail expenditures by type of good (from the Bureau of Labor Statistics), and estimated sales per square foot by type of store (from the Urban Land Institute). (See the "Opportunities and Constraints Analysis and Village Programming Recommendations" report, February 1991, for a more detailed economic and demographic analysis.) It was determined that four types of retail centers could be provided that vary in size and are directed toward different market segments. These four types of retail centers appear in the Conceptual Plan. Each type of center includes a different range of commercial uses and serves a different market segment within the array of shopping opportunities, as determined in the economic analysis. Major retail centers include Comparison, Neighborhood, Convenience Centers and Travel Commercial areas. Neighborhood and Convenience Centers will capture the bulk of grocery, drugstore and liquor store expenditures in the planning area. The Comparison Center will also provide these goods, but will also contain sellers of apparels, household furnishings, electronic equipment, and sporting goods. The Comparison Center may also contain a multiplex cinema, health club and other entertainment-related uses. Travel Commercial areas will emphasize automobile-related services, but may also contain fast food restaurants and some equipment dealerships.

Except for the Travel Commercial areas, the retail centers are distributed throughout the study area in a pattern that allows the greatest number of residents access to shopping opportunities within walking distance of where they reside. The retail component of these Centers also varies in size and character depending on the size of the Village and its relationship to households, roads, transit and other commercial areas. Every attempt has been made to place some type of retail center within each square mile defined by the areas arterials, thus allowing residents to reach a retail center without having to cross an arterial street.

The size and retail characteristics of these centers is consistent with the economic analysis performed by *Economic Planning Systems*. The projected population for the growth area will generate a demand for approximately 1.1 million square feet of retail space. The Plan provides approximately 890,000 square feet of retail space, or approximately 90 acres, based on a floor-to-area ratio of 0.25 for Core Commercial areas and 0.15 for Travel Commercial areas. Additional retail areas within the existing City are likely to capture the remaining demand from the growth area, as well as unmet demand in the City. A new regional retail shopping center will be examined during the upcoming General Plan update and may be located outside of this planning area with good access to Highways 99 and 59, where it will be exposed to high levels of regional traffic. Merced currently has

a high existing per capita retail sales rate when compared with the region.

Office and Office-Commercial land uses are associated with the larger Core Commercial areas. They are intended to provide some employment and commercial diversity to each Village. Office development is limited to Villages with excellent transit connections to downtown. Office-Commercial areas are located opposite of Neighborhood Center Core Commercial areas. They provide sites for smaller increments of commercial development which can complement the shops and services offered by the Centers, and they may also provide sites for smaller scale independently owned businesses, such as small discount appliance or hardware stores. Office-Commercial sites may be a maximum depth of 250 feet from the adjacent arterial to encourage parcelization into smaller lots and to avoid competition with Core Commercial areas.

A Comparison Retail Center is located at the junction of the "M" Street Transitway and Bellevue Road, where a transit spur could connect to the proposed U.C. Campus. The Comparison Retail Center creates a major retail and cultural focus in the planning area, and may include: comparison retailers, such as junior department stores or discount department stores such as K-mart or Mervyns; a grocery store; a drug store; a multiplex cinema; health clubs; other retail shops and services; and professional offices. Civic uses such as a library, post office or community center are recommended adjacent to the Center. A large office complex and a community park are located across Bellevue Road from the Comparison Center. This cluster of shopping, employment, and civic uses, well served by transit, creates a "town center" for the growth area, without overshadowing the important role of the existing downtown Merced.

Three Neighborhood Retail Centers are designated in the planning area. Each Neighborhood Retail Center has a grocery store and a second anchor store, such as a drug store, and ancillary shops. Neighborhood Retail locations create a sufficient market area for each shopping center, and allow most residents to be within 1 to 1 1/2 miles of a grocery store.

The Conceptual Land Use Plan also shows five Convenience Centers. Convenience Centers provides many convenience goods and services, such as dry cleaners and video stores, and can be reached on foot by many residents. Convenience Centers are distributed to minimize the need for residents to cross or use arterials for many shopping trips.

Travel Commercial uses are designated on the east-west arterials near their intersection with Highway 59. Travel Commercial areas are intended to provide convenient locations for auto-oriented uses, such as gas stations, fast-food, car washes, and other commercial uses that require high drive-by visibility. (Some of these uses may also be located in the Village Core Areas, as well.) Travel Commercial areas must be set back from the Highway 59 intersection a sufficient distance to allow ultimate construction of an interchange; driveways and other intersections must be a minimum of 800 feet from the intersection.

Schools and Parks

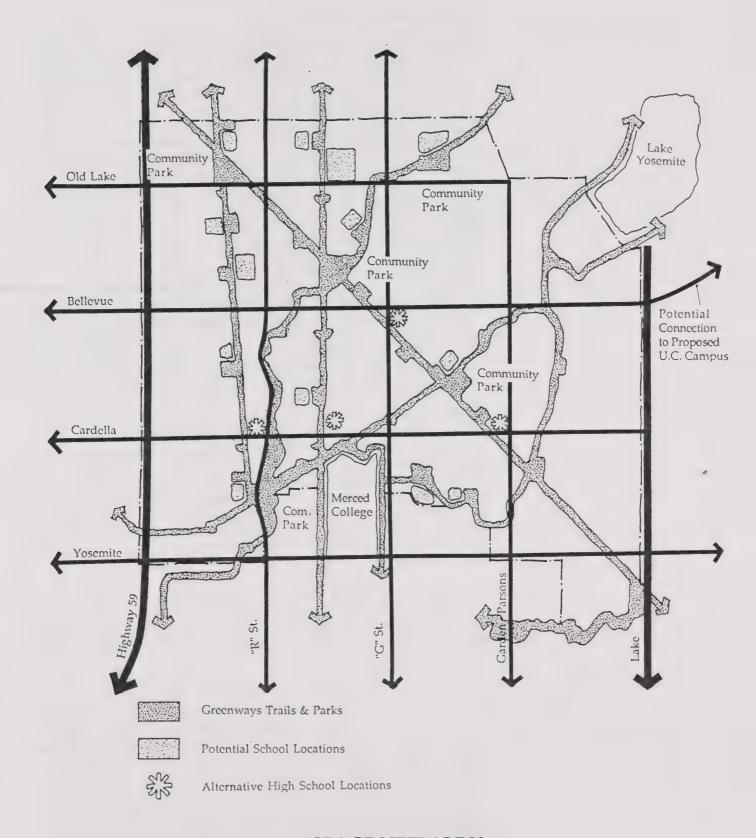
Approximate locations and extent of schools, parks and trails are depicted in the Conceptual Land Use Plan, and were developed in conjunction with the two School Districts and the Parks and Recreation Department. The schools, parks and trails form an open space network to serve the needs of future area residents (Figure 2). Population estimates call for two high schools in the planning area. The preferred location of one high school is along "M" Street just north of Old Lake Road. The preferred location of the other high school has not been determined and is pending the recommendation of the high school district. Recommended alternative locations are noted by asterisks in the southern half of the Conceptual Land Use Plan. These high visibility locations recognize the importance of these facilities and encourage their use for after-school sports and cultural activities; they are also connected to the rest of the planning area by the "Greenways" trail network.

The Junior High and Elementary Schools have been dispersed throughout the growth area to accommodate the surrounding population and to minimize arterial crossings, especially for elementary school students. The identified locations for these facilities are approximate, but in all cases they should be placed in conjunction with mid-size (5 to 10 acre) parks and should be adjacent to the area-wide trail network.

Parks are shown throughout the planning area, and are sized and distributed to stress convenient access on foot. Five community parks with a total of about 110 acres are would be located through the planning area at build out. The largest community park (approximately 30 acres) is located at the confluence of Fahrens and Cottonwood Creeks and is configured into a linear park that would not only provide ample space for ballfields and play areas, but would also take advantage of the passive recreation opportunities of the riparian banks of the creeks. In addition to the Community and School parks, sites have been illustratively shown for small (2 to 5 acre) Neighborhood Parks. These small open spaces will be located in both the Villages and surrounding Secondary Areas to provide relief from the urban environment and serve as neighborhood focal points. These small parks are large enough to contain a ballfield, a tennis or basketball court, and tot lots.

Light Industrial

A 110 acre area adjacent to Highway 59, between Yosemite and Cardella Road, has been designated Light Industrial. This designation provides a noise buffer to residential areas if Highway 59 is upgraded and expanded to freeway status, and it provides additional employment opportunities in the planning area in an area where industrial activities now take place. Where the Preferred Alternative does indicate single-family uses adjacent to Highway 59, additional setbacks, berms and soundwalls will be required.



OPEN SPACE NETWORK Figure 2

Transportation Components

The circulation system encourages alternative modes of travel, while providing adequate access for automobile traffic. The Village Concept and Design Guidelines emphasize local streets and connector streets that provide direct connections to destinations. The connector streets also have less traffic and are narrower than traditional collectors, which allowing homes to face onto them and slowing vehicular traffic in pedestrian-oriented areas. This connector street pattern is achieved by providing multiple routes to destinations without relying on arterials. This pattern of multiple routes keeps traffic volumes low on individual connector streets and allows pedestrians and bicyclists to avoid unfriendly arterials. This pattern also favors pedestrians by slowing traffic, reducing pavement and improving the sense of shelter afforded by houses and trees. Local and connector streets should be designed to discourage through traffic, while still providing an interconnected and a legible circulation network.

The arterial roadway network for the first 20-year growth increment will be a one-mile grid of 4-lane arterial streets (Figure 3). The 128 foot right-of-way reserved on these streets permits the arterials to be widened to 6 lanes if traffic from growth north and east of the planning area warrant it. (Additional analysis is contained in the "Working Paper on Circulation Options in Future City of Merced", prepared for the City of Merced by Fehr and Peers Associates, June 1991.)

Arterial-connector intersections occur frequently enough to diffuse the volume of traffic over several connector streets, but not so frequently to interfere with the smooth flow of traffic on arterials. Generally, intersections on arterials are to be spaced at eighth of a mile intervals on east-west arterials and quarter mile intervals on north-south arterials. Local circumstances may eliminate the need for some intersections in some locations. The larger spacing on north-south arterials is intended to make travel along these routes more efficient as areas north of the planning area grow and greater capacity is needed in this direction.

Because of their pedestrian-oriented character, Villages do not straddle arterials, however Office, Office-Commercial and Surrounding Area Residential can be located across arterials from Core Commercial Centers, and take advantage of the Cores' shops, services, and transit stops.

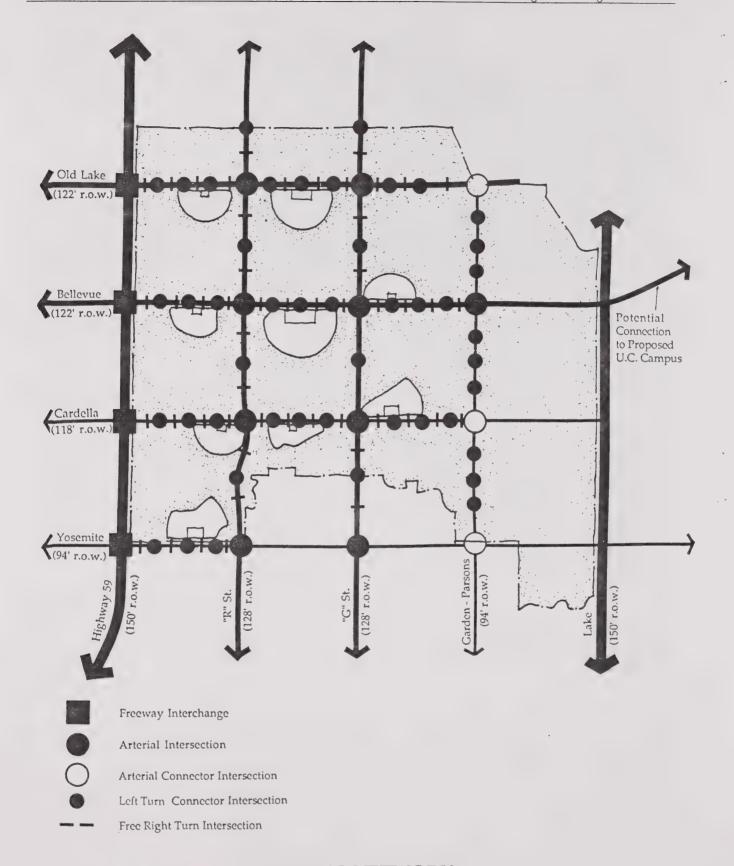
A transitway extends from the City's downtown along M Street and continues to the northern edge of the study area (Figure 4). The transitway would initially provide high-occupancy vehicle (H.O.V.) lanes for express bus service and could be retrofitted for light rail in the future. Feeder buses would connect the Villages to the main M Street transitway with frequent service with timed transfers. An additional transitway is possible east of the M Street transitway along Bellevue Road, extending to the proposed University of California campus. Supporting Park-and-Ride lots are indicated at each stop along the M Street transitway, across from the Core Commercial Areas.

The Plan indicates an open space network (Figure 2) including pedestrian and bicycle trails along "Greenways" for recreation and to

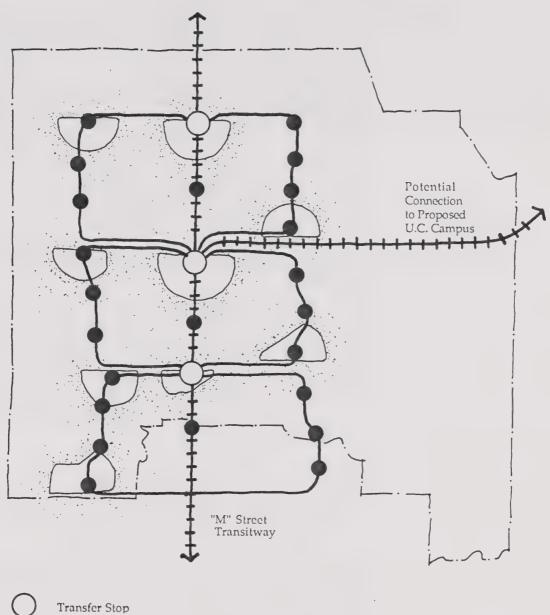
connect residential neighborhoods with schools, parks, other civic land uses and the Core Commercial centers throughout the planning area. This trail network takes advantage of areas which are constrained for development, including:

- creeks and other wetlands,
- utility right-of-ways,
- buffers to major roadways, and
- the Yosemite Valley Railroad right-of-way (YVRR r.o.w.).

While it is preferable to preserve the YVRR r.o.w. for a bikepath, it may be infeasible to obtain easements along its entire alignment, therefore, alternative bike routes may be provided roughly parallel to the YVRR r.o.w. as long at it connects to the area wide bike network at pre-determined arterial street crossings.



ARTERIAL NETWORK Figure 3



Other Transit Stop

Trunk Line

- Feeder Bus

TRANSIT NETWORK Figure 4

Environmental Factors

The "Opportunities and Constraints Analysis and Village Programming Recommendations" Report (February 1991) contains a more detailed discussion of environmental factors

Wetlands: Over 1,000 acres of the planning area may contain some type of wetland (Figure 8). Wetlands include vernal pool, marsh, or riparian habitats. Vernal pools are depressions which fill with seasonal rains and support various reeds and rushes through the spring. The sparse vernal pool designation denotes areas with probable low concentrations of vernal pools, and the dense vernal pool designation denotes areas with probable higher concentrations. Marshes contain pooled or slow flowing water and support dense vegetation consisting of cattails, rushes, and the like. Marshes provide a habitat for migratory waterfowl. Riparian vegetation areas generally denote woodlands associated with creeks or other drainageways. Riparian areas support habitat for deer, birds and fish, and protect against erosion when preserved.

The exact extent and quality of these wetlands has not been identified; wetland areas shown will require site-specific review to assess their biotic value and development limitations. Recognizing the "potential" nature of the wetlands areas identified in this report, an "underlying" zoning designation has been established for areas of potential wetlands. The underlying zoning provides a basis for establishing development densities and property values if wetlands analysis indicates that existing wetlands will not be impacted by development or if wetlands are mitigated off-site.

Flood Control: The Army Corps of Engineers current flood control plan for the study area intends to channelize Fahrens Creek, approximately one quarter mile east of Cottonwood Creek, just north of Cardella Road, as well as Cottonwood Creek to G Street. This project may be extended further into the study area if development requires it.

Noise: A major noise source within the study area is air traffic from Castle Air Force Base. Noise levels reach as high as 70 Ldn in some locations. Noise may not preclude development, but sound attenuation through building construction may be needed in some portions of the study area.

Areas adjacent to Highway 59 may also be affected by excessive noise levels if it is upgraded to freeway status. If further analysis shows that traffic noise will exceed acceptable levels, additional setbacks, soundwalls, berms, and/or vegetation may be required to buffer adjacent residences.

High Voltage Power Lines: Two high voltage power line easements pass through the study area. One crosses diagonally through the area from the northwest corner, south to the southeast corner at Black Rascal Creek. The second right-of-way joins the first above Cardella Road to the east of the Bellevue Ranch Property, and crosses to the southwest along Cottonwood Creek and through the Transmeridian Property.

There may be a potential health risk from the electromagnetic fields produced by power lines. The State is continuing to study this issue and has not adopted a specific policy on the restriction of land uses with a close adjacency to high voltage power lines. At this point, schools are sited a minimum distance from high voltage power lines in accordance with State standards. Schools are setback at least 100 feet from the 115 kV power line that traverses the planning are from its northwest to its southeast corner; schools are setback at least 150 feet from the 230 kV power line that traverses the site from its southwest to its southeast corner.

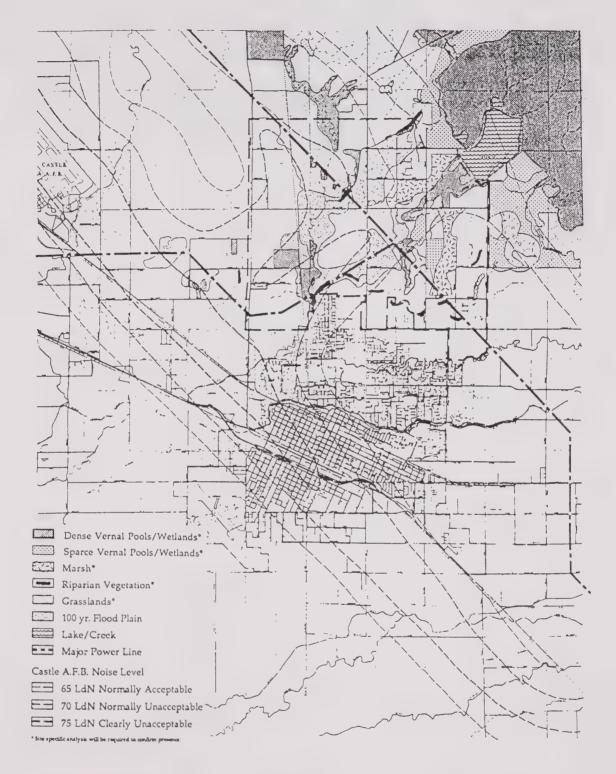


Figure 5
ENVIRONMENTAL FACTORS

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San Francisco, California

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CITY OF MERCED, CALIFORNIA

4. Organization of the Design Guidelines

These Design Guidelines intend to create high-quality, diverse and livable communities by reducing reliance on the automobile and by making walking, bicycling and transit-use convenient and enjoyable. They are intended to provide clear direction to landowners, developers and City agencies, while maintaining flexibility. Conventional patterns of development are generally permitted under the Guidelines, with relatively minor, but essential, modifications. The Design Guidelines are organized in the following sections:

- 1. **Definitions**: the most fundamental design components: Villages, Core Commercial Areas, Surrounding Areas, Open Space and Other Areas;
- 2. General Criteria: general requirements describing the distribution, size and basic characteristics of the fundamental design components;
- 3. Streets and Circulation System: appropriate street patterns, types, intersections and parking;
- 4. Pedestrian and Bicycle System: route and design characteristics for trails, sidewalks and bike routes;
- 5. Transit System: anticipated service patterns and features;
- **6. Parking Requirements and Configurations:** guidelines pertaining to location, configuration, size and parking space requirements;
- 7. General Built Character: specifications for intensities, densities, configurations and aesthetic characteristics applying to all land uses;
- 8. Commercial Intensities, Siting and Design: specific standards for Core Commercial, Office, Office Commercial, Travel Commercial and Light Industrial areas;
- Residential Densities, Siting and Design: guidelines for residential development in Village and Surrounding Areas, including single-family and multi-family types;
- 10. Public and Semi-Public Siting and Design: specific standards for community services, community centers, schools, day care, utilities and quasi-public uses; and
- 11. Open Space, Parks and Plazas: a description of the open space system and requirements related to "greenway" trail corridors, parks, plazas and wetlands.

B. DESIGN GUIDELINES

1. Definitions

Guideline 1A:

VILLAGES

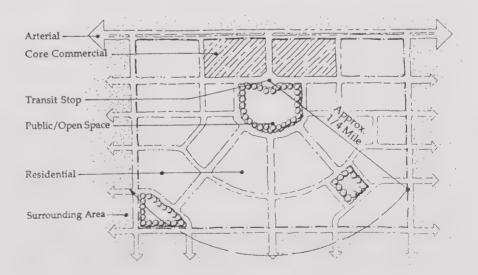
A Village is a mixed-use community within an average 1200 to 1600 foot walking distance of a transit stop and Core Commercial area. All villages must include a mixture of parks, shops, medium density homes, and civic uses. Villages combine these uses within a comfortable walking distance, making it convenient for residents and employees to travel by transit, bicycle or foot as well as by car.

Explanation:

Villages provide the fundamental development pattern within urban growth areas north of Merced. Village sites should be located on or near planned transit segments. The Village design guidelines establish standards for site selection, design and development to ensure that Villages succeed in providing a mix of uses, a variety of housing types, and a physical environment that encourages pedestrian and transit travel.

Justification:

Villages offer an alternative to traditional suburban development patterns by providing housing, recreation, shopping, and service opportunities for the increasingly diverse population of Merced, and physical environments that facilitate pedestrian and transit access. Developing a network of Villages in northern Merced will also serve to strengthen Merced's transit system and establish a more traditional pattern of neighborhoods that are livable, identifiable and pleasant.



Guideline 1B:

CORE COMMERCIAL AREAS

Each Village must have a mixed-use Core Commercial area located immediately adjacent to Village Residential neighborhoods. At a minimum, the Core area should provide convenience retail and civic sites. Larger cores may also include major supermarkets, professional offices, day care, restaurants, service commercial, entertainment uses, comparison retail and other retail stores.

Explanation:

The nucleus of the Village will be a mixed-use Core Commercial area located adjacent to the transit stop, with shopping, and the potential for service commercial, professional offices, and entertainment uses. These uses will allow convenient shopping to and from the transit stop during lunchtime, evenings, and weekends. Optional upper floor office and residential uses in the Core Commercial area increase the mixed-use, round-the-clock nature of the Core area. A transit stop and village green of 2 to 6 acres should be located between commercial uses and Village Residential areas.

Three kinds of Core Commercial areas will occur in the study area: Convenience Centers—providing a convenience "mini-market" with some ancillary retail (1.5-3 acres); Neighborhood Centers—providing a supermarket with an additional anchor store, major ancillary retail and professional offices (8-12 acres); and a Comparison Center—providing a supermarket and drugstore, ancillary retail, professional offices and additional anchors such as junior department stores, cinemas and health clubs (20-30 acres).

Iustification:

A commercial Core at the center of each Village is essential because it permits most residents and employees to walk or ride bicycles to obtain basic goods and services. And, those who still choose to drive to shop will have to go fewer miles and can avoid using arterials. The size and location of Core Commercial areas reflect the anticipated demand, proximity to transit and phasing considerations. Core Commercial areas also provide a mixed-use destination that makes transit use attractive. People will rarely use transit to get to work if the transit stop near home or work is not combined with retail and service opportunities.



Calthorpe Associates • October 1991 • page 21

Guideline 1C:

VILLAGE RESIDENTIAL AREAS

Village residential areas include residences that are within a convenient walking distance from Core Commercial areas and transit stops, and are built at densities high enough to support them. An average minimum gross density of 10 to 15 dwelling units per acre (du/ac) will allow a mix of small lot single-family, townhomes and apartments in Village Residential areas.

Explanation:

All Village Residential areas should be pedestrian in scale, ranging from slightly under to slightly over one-quarter mile in radius and should provide direct and easy access to Core Commercial areas and transit stops. Village residential areas may contain a variety of housing types and ownerships, ranging from small lot single-family homes to apartment buildings, as long as the overall average gross density of the Village is at least 10 du/ac. and not more than 15 du/ac. (Gross densities calculations should include the area in lots as well as in streets and alleys immediately in front and behind the lots.) While housing diversity is desirable, this density requirement could be achieved using only a single-family product--small lots with carriage (ancillary) units. Small, 2 to 4 acre village parks should be provided as an urban amenity within these denser Village Residential areas.

<u>Iustification</u>:

Village residential areas provide a higher concentration of households in close proximity to transit service and Core Commercial areas. This pattern encourages walking, reduces reliance on the automobile, supports transit and commercial services, and creates distinct, identifiable neighborhoods in the growth area.

Guideline 1D:

SURROUNDING AREAS

Each Village will have a Surrounding Area adjacent to it which includes lands no further than one mile from the Core Commercial area. The Surrounding Area street network must provide multiple direct street and bicycle connections to the center without use of an arterial street. Surrounding Areas may have lower density housing, public schools, community parks, limited areas of Office and Office-Commercial uses, and park-and-ride lots.

Office or Rendential Currounding Area

Explanation:

The Surrounding Area is intended to provide uses that are not appropriate in Villages, because they are not sufficiently compact and are more reliant on the automobile. Generally, Surrounding Areas are designated for single-family, Office and Office-Commercial areas that will help support Village Core Commercial businesses and transit service. Public schools and parks that provide services to both the Surrounding Area and Village should be located in Surrounding Areas near the boundary of the Village.

Commercial uses that are very similar in nature and market appeal to those located in the Village's Core Commercial area are not allowed in Surrounding Areas because they diminish the viability of and focus upon the Village's retail center.

Justification:

A substantial share of Merced's growth will continue to be devoted to single-family residential development. These areas alone typically have densities too low to be adequately serviced by transit or to create a healthy mixed use environment. By maximizing street connections to Villages and making bike access to transit stops convenient, transit utilization by Surrounding Area residents and employees areas may increase. The Village Concept maintains about a 7 to 1 ratio of single-family Surrounding Area to Village land areas. Providing multiple interior street connections between Villages and Surrounding Areas will also keep many auto trips off arterials. Locating public schools in Surrounding Areas will provide a service for the Village without using valuable transit-accessible land. Neighborhood parks can help to create an identifiable, neighborhood focus, especially in Surrounding Areas that are not immediately adjacent to a Village.

Guideline 1E:

OPEN SPACE, PARKS AND PLAZAS

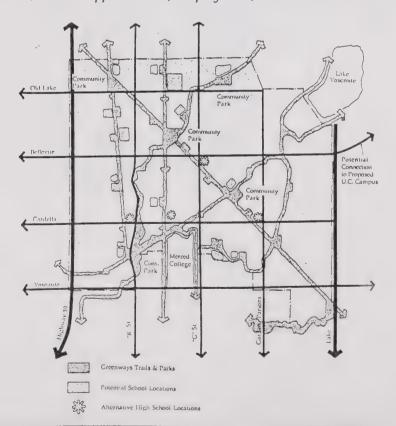
The location of parks, plazas and trails should be coordinated to distribute a variety of recreation opportunities throughout the growth area. The growth area should contain a network of open space including community parks, neighborhood parks, village parks, village greens, plazas and an interconnected "greenway" trail system.

Explanation:

Community parks are major recreation facilities of at least 18 acres and contain many ballfields, playlots, picnic opportunities and other facilities. Village parks are located within Villages and should be 2 to 4 acres. A 5 to 10 acre neighborhood park should be associated with each elementary school in the Surrounding Areas and 4 to 6 acre neighborhood parks should be distributed to serve Surrounding Areas that would otherwise be more than one-eighth of a mile from a park. Finally, greenway bicycle and pedestrian trails should be created along major creeks, high-voltage power lines, the "M" Street Transitway and approximately along the abandoned Yosemite Valley Railroad (YVRR) r.o.w. to provide easy access to parks and schools that should be sited to abut them

Justification

Residents and employees in the growth area should not have to go far to enjoy public open space. A City-wide network of greenway trails and parklands will provide safe and convenient access to a wide range of recreational opportunities, employment, and other uses.



Guideline 1F:

OTHER USES

Travel Commercial, Light Industrial and Rural Residential areas will contain uses that rely extensively upon autos or trucks for their business. These uses are inappropriate for Villages or Surrounding Areas. except for gas stations, car washes and fast food restaurants, which may occur in Office-Commercial areas.

Explanation:

Many uses typically allowed in commercial areas rely predominantly upon auto travel to generate business patrons. These uses, such as, auto dealers and repair shops, mini-storage facilities, travel commercial complexes, and motels (not including destination resorts), should not be permitted in Villages or Surrounding Areas. Travel commercial uses are appropriate adjacent to freeway interchanges, but adequate access must be provided

Similarly, light industrial uses should not be permitted in Villages or Surrounding Areas. They are not compatible with nearby residential uses and generate few employees to support Core Commercial areas. Industrial uses are appropriate where existing industrial activities occur and where major freeway noise impacts are anticipated.

Rural residential single-family subdivisions of less than an average of 2 du/ac are also not appropriate for Villages or Surrounding Areas (not including wetland areas). Major existing clusters of rural residential along potential freeways (Highway 59) should remain at their existing densities. New rural residential areas should be located in areas where the extension of urban services is not anticipated (east of Gardner-Parsons) and be used as a buffer from agricultural open space.

Justification:

In order for transit to be economically viable, uses near transit stops must have a minimum average gross residential density of 10 units per acre and commercial uses must create a high level of pedestrian activity. Land near the transit stop should reinforce transit use by supporting higher density, pedestrian-oriented uses and development patterns. Uses which are primarily auto-oriented are not appropriate for Villages or surface areas and are better located near major highways.

2. General Criteria

Guideline 2A:

DISTRIBUTION OF VILLAGES

Villages should be located to maximize access to their Core Commercial areas from Surrounding Areas without relying on arterials. Villages with major retail centers should be spaced at least one mile apart and should be distributed to serve various growth subareas. Generally, there should be one Village for each full square mile bound by arterials, except in rural areas. The Conceptual Land Use Plan (Figure 1) demonstrates this pattern.

Explanation

Villages should be distributed throughout the study area in a pattern that allows the greatest number of residents access to a variety of shopping opportunities. Villages should also be distributed to permit residents to walk to retail and public facilities without having to cross an arterial street. Villages should also be located to take advantage of main transit lines and existing retail market demand.

<u>Iustification</u>

Appropriate village spacing provides convenience retail opportunities that are within an easy walk for most residents. Appropriate spacing also ensures the viability of the retail centers and better links transit stops to concentrations of residents and Core Commercial services.

Guideline 2B:

VILLAGE SIZE

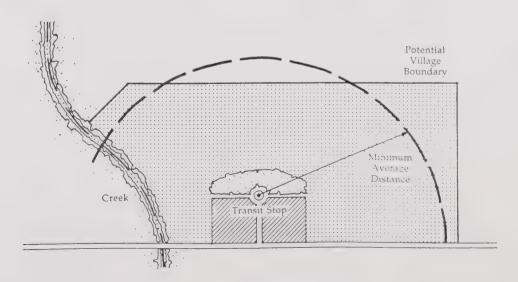
The boundary of each village varies with the size of the Core Commercial area and does not extend across arterials. While the shape of the Village may vary, a Village's size should not be less than the area described by the minimum average distance required. Villages shall extend a minimum average of 1600 feet from transit stops adjacent to a Comparison Center; a minimum average of 1400 feet from transit stops adjacent to Neighborhood Centers; and a minimum average of 1200 feet from transit stops adjacent to Convenience Centers. The minimum average distance requirement does not apply to areas with major intervening features such as major creeks and high-voltage power lines; however, Villages shall be at least 100 acres when associated with a Neighborhood Center, and 50 acres when associated with a Convenience Center. In no case shall a Village extend more than 2000 feet from a transit stop.

Explanation:

The minimum size of a Village should vary according to the kind of Core Commercial area within the Village; larger Villages are associated with larger Core Commercial areas. The distance requirement establishing the size of a Village is a minimum average; actual Village boundaries may be located inside or outside of this distance as long as the area described by the area described by the minimum average distance is maintained. Where major creeks and high-voltage power lines intervene, the boundary should follow the major feature, and the minimum average requirement does not apply to excluded areas.

Justification:

Villages must be minimum size create neighborhoods with sufficient numbers of households to support retail and transit services in the Core. The minimum size of a Village varies so as to place greater numbers of households near larger, more diverse Core Commercial areas.



Guideline 2C:

COORDINATED PLANNING

Applications by individual property owners shall be consistent with the type and extent of land uses described in the Conceptual Land Use Plan. Land uses may be reconfigured across property lines but only after a comprehensive Village Development Plan or a Specific Plan has been approved by the City.

Explanation:

The Conceptual Plan and the General Plan are the primary coordinating document for land uses within the study area. A single project proposal should be submitted by property owners who are coordinating their efforts, to ensure consistency with the Conceptual Plan and Design Guidelines.

Justification:

Villages represent a departure from traditional single parcel development and require coordinated planning and implementation of public improvements such as streets, pedestrian paths, bikeways, and plazas. The greater the number of property owners, the more difficult it will be to reach consensus on Village plans. Property owners must work together and with the City to formulate development plans and implementation mechanisms for Village sites.

Guideline 2D:

PHASING

The growth area must be developed in a balanced phasing pattern. Schools and parks must be dedicated concurrent with commercial and residential uses. Furthermore, areas must be set aside for land uses that will be needed in later phases but where market demand needs to mature, such as Core Commercial and higher density housing areas.

Explanation:

Villages represent relatively large projects which will be executed over several years. The phasing of the project is critical to its success, both as a financial undertaking and as a mechanism to encourage transit use. In order to encourage the public service agencies to provide public facilities in a timely manner to serve the needs of residents, developers are asked to dedicate sites designated for public uses concurrent with development of commercial and residential uses. Developers should also work with the City to ensure that the recommended mixture of land uses are achieved in a timely manner.

<u>Iustification</u>:

The retail uses of a Village are often dependent on the market area developed in the residential and office components of the project. While this Core Commercial Center must often follow the residential development, the land for public facilities and parks can be set aside and developed concurrently to aid in the project's marketing and to supply amenities and services to new residents.

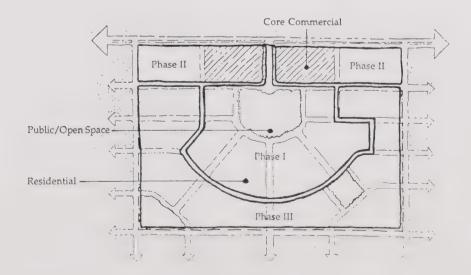


Illustration of possible phasing sequence.

3. Street and Circulation System

Guideline 3A:

STREET PATTERNS

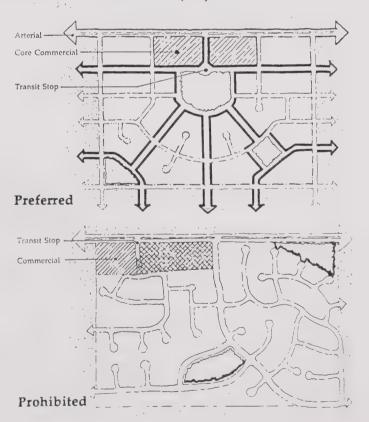
The Village and Surrounding Area street system should be clear, formalized, and inter-connected, converging to transit stops, Core Commercial areas, schools and parks. Cul-de-sac and "dead end" streets should be minimized and connected by pedestrian passages to through streets or greenways.

Explanation:

The street pattern should be simple and memorable, avoiding winding roads, dead end streets and cul-de-sacs that cut off direct access to Village Centers. Streets should converge near common destinations that contribute to an areas unique identity, such as transit stops, Core Commercial areas, schools and parks.

Justification:

Clear, formalized, and inter-connected street systems make common destinations visible, and provide shortest and direct paths. With an inter-connected street system, any single street will not be overburdened by excessive traffic, thus reducing the need for cul-de-sacs and minimizing the width of streets. A circuitous and complex street pattern will discourage walking; a simple and direct patternstreet with landmarks and a simple form will be memorable and familiar.



Guideline 3B:

MULTIPLE ROUTES

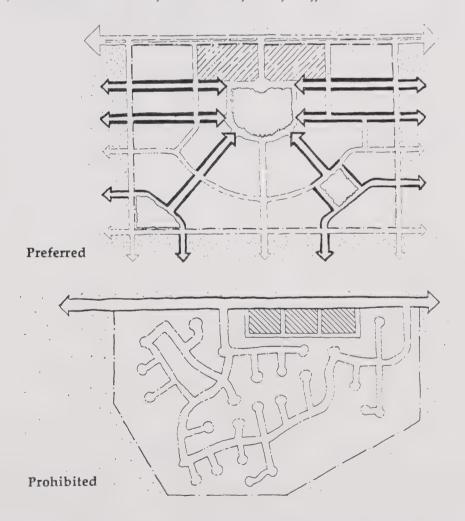
The street system should provide multiple and parallel routes between the Core Commercial area, the Village, and Surrounding Areas. In no case shall trips which could be internal to a square mile bound by arterials be forced onto an arterial.

Explanation:

The street system should allow autos, bikes, and pedestrians to travel on small local streets to any location in the Village and to the Surrounding Area. At no time should an arterial street be the only route to and from an area of the Village and its Surrounding Area.

Justification:

In many typical suburban communities, arterial streets are the main travel network and only route to important destinations. Forcing all cars onto a few main roadways not only increases traffic congestion, but also requires pedestrians to walk along busy, smoggy, wide, and "unfriendly" boulevards, rather than small, peaceful streets. Multiple parallel routes to the Core area provide short and convenient routes for pedestrians, as well as facilitate the flow of traffic.



Guideline 3C:

ARTERIAL STREETS

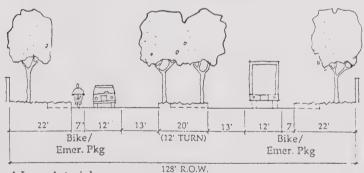
Arterial streets should allow efficient conveyance of through traffic and must not pass through Villages. The paved width of arterials should be minimized, while providing for safety, efficiency and long term needs. Lanes should only be paved once demand has been established.

Explanation:

The regional traffic circulation system is dependent upon an efficient and smooth-flowing network of arterials. The required right-of-way (r.o.w.) for arterials varies with anticipated need. A 128 foot r.o.w. should be set aside for "G" and "R" Streets to reserve the potential for 6 lanes if growth north of the study area warrants it. Bellevue and Old Lake Roads should also have a r.o.w. of 128 feet to maintain the potential for transit service and additional travel lanes if the University of California Campus is built near Yosemite Lake. A 94 foot r.o.w. should be set aside for Gardner-Parsons and Yosemite Roads. A 118 foot should be set aside for Cardella Road. Highway 59 and Lake Road should have a r.o.w. of 150 feet to reserve the potential for future freeway status. (For additional information, refer to the "Working Paper on Circulation Options in Future City of Merced", prepared for the City of Merced by Fehr and Peers Associates, June 1991.)

Justification:

Arterial streets are barriers to pedestrian activity and should not pass through Villages. Instead, arterials should be located at the perimeter of Villages. Medians and reduced pavement widths help facilitate pedestrian movement that will occur across arterials, while not compromising efficiency.



4-Lane Arterial

14' 12' 13' 12' 14' 15' 15' 15' 128' R.O.W.

Calthorpe Associates • October 1991 • page 32

Guideline 3D:

ARTERIAL INTERSECTION SPACING

Intersections should be designed and spaced to provide adequate access, while maintaining adequate speeds and service. Arterial intersections with connector streets should occur frequently enough to reduce the traffic volumes on any given connector to levels that will permit residences to front onto that connector street.

Discussion:

Generally, arterial-connector intersections should occur every eighth of a mile on east-west arterials and every quarter mile on north-south arterials. (See Figure 3, page 14.) Left-turn intersections should be spaced at least 1200 feet apart along east-west arterials, and at one-half mile spacing along north-south arterials. Left-turn intersections may or may not be signalized, depending on their level of service. Signalized intersections at Core Commercial areas are encouraged to facilitate pedestrian movement. Pedestrian crossings should be provided at all signalized arterial-connector intersections.

Right-in/right-out intersections along arterials should not occur less than 500 feet from any other intersection on an arterial, except on north-south arterials where they should not occur less than 1200' from other arterial intersections and near Highway 59, where they should not occur less than 800 feet from the end of any freeway ramp. Where arterials intersect with other arterials, a 150 foot right-of-way should be reserved to provide adequate space for potential turning lanes.

Justification

Proper intersection dimensions and spacing allow arterials to carry high volumes of traffic efficiently, while also providing adequate access to adjacent areas.

Guideline 3E:

CONNECTOR STREETS

Connector streets should connect Village and Surrounding Areas to Core Commercial areas, schools and community parks without the use of arterials. They should be designed to carry moderate levels of local traffic smoothly, in a way that is compatible with bicycle and foot traffic. A network of connectors should provide many, frequent alternative paths through neighborhoods. The connector network should not provide a speedy through-route alternative to arterials.

Explanation:

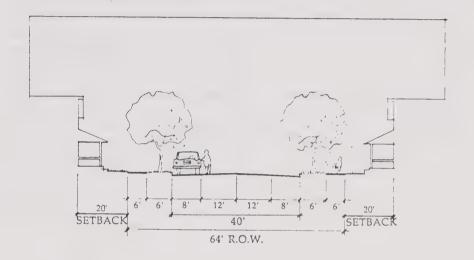
Connector streets should form a network of routes that provide alternative paths through neighborhoods and to major destinations, such as Core Commercial areas, schools and parks. "T" intersections and "dog leg" alignments should be used to reduce through traffic and reduce speeds. The precise alignment of connectors will be determined as individual projects are designed, but should provide a network of routes that provide alternative paths through neighborhoods and to major destinations such as Core Commercial areas, school and community parks.

The width of connector streets should be minimized, especially where traffic volumes are not high. Connector streets should be widened to 70 foot right-of-ways only where they carry more than 1500 daily trips on average or serve more than approximately 200 dwelling units. Generally, connectors near arterials, Core Commercial areas and other major attractors will require a 70 foot right of way. A 64 foot right-of-way should be applied to all other connectors.

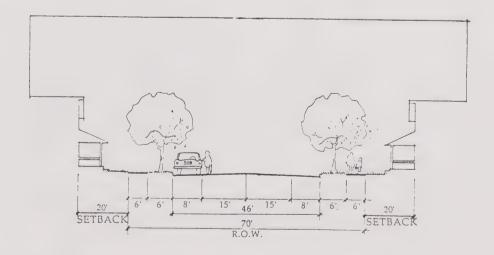
On-street parking should be provided. Connectors should contain Caltrans Class III bikeways, where bicyclists share the travel lane. Driveway cuts should be minimized and alley access to rear garages is encouraged to minimize potential conflicts among autos and bicyclists, and for the convenience of residents along connectors. Connectors should be aligned along the edge of parks and open space to enhance the aesthetic character of the street and sidewalks.

Justification:

Connectors are intended to carry moderate levels of local traffic from neighborhoods to arterials and major destinations. Their design and alignment should balance efficient vehicular travel with the safety and livability of residential areas. Minimizing the width of travel lanes and using on-street parking, "dog legs" and "T" intersections, connectors will slow traffic and offer a pleasing streetscape, while providing smooth vehicular movement. Providing a connector network with frequent, alternative paths will distribute traffic volumes over more routes and permit all connectors to have residences that face onto them and provide a environment oriented towards pedestrians and bicyclists.



Connector Street (64' R.O.W.)



Connector Street (70' R.O.W.)

Guideline 3F:

TRANSITWAYS

Transitways are a special category of connector street that should be designed to accommodate transit service and easy bicycle movement.

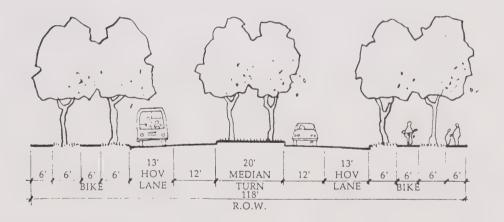
Explanation:

Transitways should reserve a 118 foot r.o.w. to accommodate two high-occupancy vehicle (H.O.V.) lanes for express buses or light rail, two travel lanes for other vehicles, bicycle routes and special landscaping. Additional right-of-way may be needed to preserve existing eucalyptus windrows south of Cardella Road. On-street parking is not permitted on transitways, in order to minimize their width and ensure good transit and emergency vehicle access.

Special landscaping should be used along transitways to express significance as an important connection between village centers, parks, schools and other community facilities. Existing windrows along "M" Street should be incorporated. Furthermore, trees should be planted in private yards to shade sidewalks and travel lanes.

Justification:

The transitway provides for all modes of transportation--transit, car, bicycle and foot--making it a focal point for the Villages and Surrounding Areas through which it passes, instead of a barrier that is difficult to cross.



Transitway

Guideline 3G:

COMMERCIAL STREETS

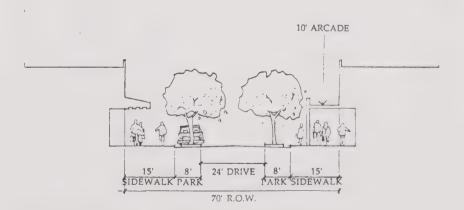
Commercial streets located in the center of Core Commercial areas should be designed to accommodate pedestrians, slow traffic, provide on-street parking and create a pleasant shopping environment.

Explanation:

Commercial streets should have a 70' r.o.w. and should not be more than 2 blocks in length. Two travel lanes and on-street parking should be provided to create an intimate shopping environment that maintains drive-by visibility to stores. Shops should front onto commercial streets with minimal setbacks. Wider sidewalks, street trees, awnings and arcades should be used to accommodate this active, pedestrian environment Curbs and landscaping should be configured to allow street cleaning equipment.

Justification:

Commercial streets can create a pleasant and active commercial spine within Core Commercial areas. Slow traffic and comfortable walking environments will encourage walking for many shopping trips, thereby reducing reliance of the automobile and creating an active "main street."



Commercial Main Street

Guideline 3H:

LOCAL STREETS

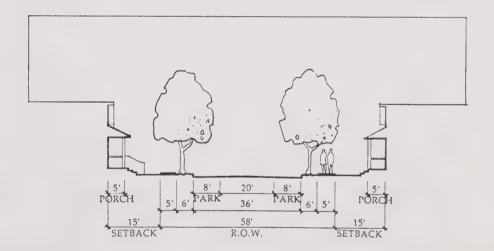
Local streets should have travel and parking lanes sufficiently narrow to slow traffic and allow trees to form a pleasing canopy over the street, while providing for adequate access for automobiles, and emergency and service vehicles.

Explanation:

Local streets should have a right-of-way no greater than 58 feet. They should be designed to serve low volumes of traffic through a pedestrian-oriented environment. Travel and parking lanes should only be wide enough to allow two vehicles to slowly pass each other. Street trees should be provided to enhance the quality of the neighborhood and provide relief from summer heat.

<u>Iustification</u>:

Local streets are the public open space in which children often play and around which neighbors interact. Vehicular movement should be controlled and provided for within this context.



Local Street

Guideline 3I:

ALLEYS

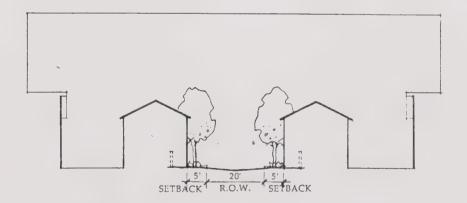
Alleys should be used to serve residential and commercial developments within Villages, and for lots facing onto parks and connector streets in Surrounding Areas.

Explanation:

Alleys provide visual relief for the streetscape and a secondary means of access to individual parcels. Alleys serving residential development should be 20 feet wide with a 5 foot setback to each garage. No parking would be allowed within the 20 foot right-of-way, but parking should be provided within garages or on-site parking areas. Visitor parking should occur on the street in front of units. Street trees and landscaping are encouraged within the 5' setback where access to garages and on-site parking is not needed.

Iustification:

For small-lot single-family houses and other smaller lotting patterns, alley-accessed garages relieve the street side of the house from being dominated by garage doors and cramped by curb cuts. In areas where walking is to be encouraged, streets lined with garages are undesirable. Alleys provide an opportunity to put the garage to the rear allowing the more 'social' aspects of the home to front the street. Streets lined with porches, entries and living spaces are safer because of this natural surveillance. Alleys in commercial areas place service vehicle access and parking away from the street and sidewalks, affording a more interesting and comfortable streetscape.



Alley

Guideline 3J:

CONNECTOR AND LOCAL STREET INTERSECTIONS

Intersections within Villages and Surrounding Areas should be designed to facilitate both pedestrian and vehicular movement. Intersection dimensions should be minimized while providing adequate levels of service.

Explanation:

Street and intersection widths should be kept to a minimum to serve pedestrians as well as cars. Right and left turn lanes at intersections should be avoided away from arterials. Curb radii should be minimized to slow traffic in Village and Surrounding Areas and reduce pedestrian crossing distances.

Justification:

A street system should balance the needs and viability of the pedestrian, as well as the car. Reduced auto speeds improve pedestrian accessibility and safety, and can continue to accommodate safe vehicular movement. Unless absolutely necessary, additional turning lanes at intersections should be avoided to minimize pedestrian crossing dimensions.

Guideline 3K:

ON-STREET PARKING

On-street parking is required on all streets, except arterials and the "M" Street Transitway.

Explanation:

Streetside parking is critical to keeping the focus of a community on the street, rather than on the interior of lots. On-street parking helps to create street activity, as well as provide functional spaces. It supports orienting building entries to the street by providing convenient access for guests and patrons. Parallel parking should be used most often, however, perpendicular on-street parking may be appropriate along shopping streets within Core Commercial areas to provide efficient shopping center layouts while still providing street connections to adjacent residential areas. To maintain travel speeds and emergency vehicle access, on-street parking should not be permitted on arterials or the "M" Street Transitway.

<u>Iustification</u>: /

On-street parking helps to "civilize" the street for pedestrians by creating a buffer between moving cars and the sidewalk. The additional parking helps to replace areas devoted to large off-street surface parking lots and places the parking near the desired street-side building entries. On-street parking tends to slow the flow of through traffic. This helps to develop a pedestrian environment where walking is desired, but conflicts with the role of arterial streets to move traffic safely and smoothly through the community.

Guideline 3L:

STREET VISTAS

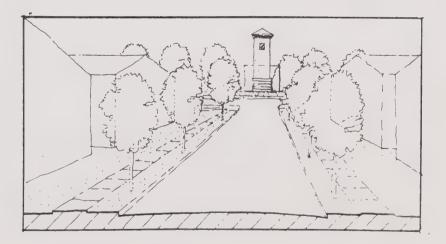
Where possible, streets should frame vistas of the Core Commercial areas, public buildings, parks, or natural features.

Explanation:

Streets and buildings should be designed so views down streets terminate at important buildings and places. This will establish a series of pedestrian "landmarks," help to make Villages and Surrounding Areas spatially memorable, and allow pedestrians to see the context of their community. Straight streets, in particular, allow clear views to landmarks and are encouraged.

Justification:

Visible landmarks help orient pedestrians and make walking routes interesting and memorable. Straight streets make destinations more accessible by making them visible; if a destination is visible, a person is more likely to walk to it.



Streets create vistas that can frame important buildings, parks or natural features.

Guideline 3M:

STREET TREES

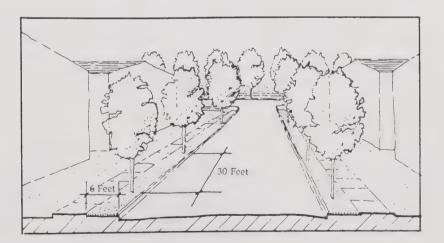
Shade trees are required along all streets. Street trees shall be spaced no further than 30 feet on center and shall be located in planter strips at of least 6 feet between curbs and sidewalks. Tree species should be selected to create a unified image for the street and provide an effective canopy.

Explanation:

Many streets are identified and remembered by their street trees. Village and Surrounding Area streets should be lined with similar trees to give them a unified and distinct image. Within Villages, trees should be placed in a planter strip between the street and sidewalk. In Surrounding Areas that do not have planter strips, the trees should be kept close to the sidewalk to provide shade and should be aligned to visually frame the street. In all cases, trees should be trimmed regularly to accommodate buses and service vehicles.

Justification:

Shade for the comfort of the pedestrian is key to creating a viable walking environment in Merced's climate. Street trees help reduce heat build-up from large asphalt areas and create a cooler micro-climate. Trees also provide habitat for local birds and beautify neighborhoods. A spacing of 30 feet on center ensures that a sufficient tree canopy is created.



Street trees improve the quality of neighborhoods and make them more walkable.

4. Pedestrian and Bicycle System

Guideline 4A:

PEDESTRIAN ROUTES

Primary pedestrian routes should be located along or visible from streets. Routes through parking lots or at the rear of residential developments should be avoided. Bordering primary pedestrian routes and bikeways with rear yards and fences should be avoided. Where primary pedestrian routes cross arterials, undercrossings or signalized intersections should be provided.

Explanation:

Too often pedestrian paths have been separated from streets, giving a confusing message to pedestrians as to the primary orientation of buildings and creating paths which reduce privacy. Where possible, the primary pedestrian path system should coincide with the street system. Diagonal short cuts through parks, plazas and greens are an exception and should be encouraged. Paths through parking lots and away from streets should be used only where large setbacks from the street are permitted such as in Travel Commercial areas and with Core Commercial anchor stores. Alternate routes around parks should be provided for night use.

Safe pedestrian crossings across arterials should be provided where major pedestrian movement is anticipated, such as along greenways and across from Core Commercial areas. Undercrossings or signalized intersections should be provided in these locations.

<u>Iustification</u>:

The comfort of the pedestrian is dependent on a sense of security and familiarity. Paths which are lined with activities or visible from residences are safer. Arterial underpasses or signals also enhance pedestrian comfort. Combined, these recommendations will encourage walking and reduce automobile use.



Guideline 4B:

CONNECTIONS TO THE CORE AREA AND THE TRANSIT STOP

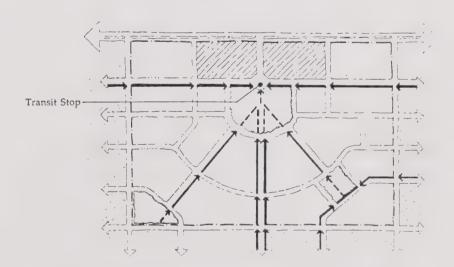
The pedestrian and bicycle system must provide clear, comfortable, and direct pedestrian access to the Core Commercial area and the transit stop.

Explanation:

Although the street and sidewalk system will accommodate many destinations within Villages and Surrounding Areas, the primary destination will be the commercial Core and transit stop. Direct paths to the transit stop should be lined with activities and be shaded. The configuration of parking, shopping and pedestrian routes should reinforce access to transit.

Justification:

Up to 75 percent of all household trips are non-job related. Many of these non-commute trips can be captured within the Village or within a short transit connection. Combining retail uses with a transit stop provides the opportunity for people to accomplish several tasks with one trip. Interruptions in the path and inconvenient walking routes discourage pedestrian travel for these types of trips. Pedestrian access is critical to the displacement of auto trips within the Village and to encourage as much transit use as possible.



Provide direct pedestrian and bicycle routes to transit stops.

Guideline 4C:

SIDEWALKS

Sidewalks are required on all streets in Villages and Surrounding Areas.

Explanation:

5 feet is a minimum width for two people to walk abreast comfortably. Larger sidewalk dimensions are desirable in the Core Commercial area where pedestrian activity will be greatest and where outdoor seating is encouraged.

Justification:

Comfortable sidewalks reinforce pedestrian environments within Villages and Surrounding Areas. The comfort and convenience of the pedestrian trip will reduce internal auto trips and reinforce the efficiency of the transit system by creating destinations which are attainable without a car and origins which do not depend solely on park-and-ride mode transfers.

Guideline 4D:

BIKEWAYS

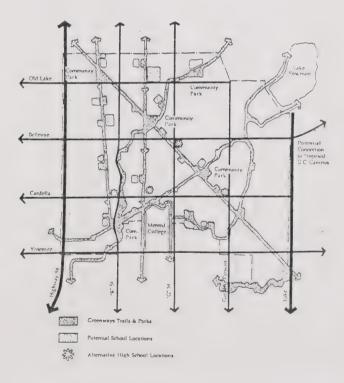
Bike paths should also be provided along greenways along the "M" Street Transitway, Bellevue Road, the approximate alignment of the Yosemite Valley Railroad (YVRR), and along major creeks and high-voltage powerlines. Bicycle routes are also encouraged on small residential streets, but designated or marked bike lanes are not required. Connections to Merced's existing bikeway network should also be provided.

Explanation:

Selected routes to the transit stop should provide marked or separated bikeways connecting with the Surrounding Areas. The greenway network provides additional bicycle-oriented connections to parks and schools. On smaller residential streets within the Village, slower auto speeds will allow bikes to share the travel lanes. The YVRR greenway bike path need not follow the existing alignment of the railroad but should run near it and provide a direct route.

Justification:

Biking can be a major alternative to the auto for local trips, trips to the transit stop or trips to work. Bicycling will be encouraged by providing greenways to parks and schools, separated or marked bike lanes on streets to Core Commercial areas, and connections to Merced's existing bikeway network.



"Greenways" provide important bicycle and pedestrian connections.

Guideline 4E:

BIKE PARKING

Bicycle parking facilities should be provided throughout Core Commercial areas, in office developments and at transit stops, schools and parks.

Explanation:

Bike racks or other bike storage facilities should be provided at various shopping, employment, transit and recreational destinations in Villages and Surrounding Areas. Bike parking may be shared between uses, but should be centrally located, easily accessible to building entries, and visible from streets or parking lots.

Justification:

Facilities should be provided to encourage bike travel to and within the Village. Bike racks located at destinations, such as the Core Commercial and Office areas and transit stops, will make it more convenient to bike to work or shopping.

Guideline 4F:

ARTERIAL CROSSINGS

Crosswalks across arterials should be provided at all signalized intersections. Undercrossings designed for pedestrians and bicyclists should be provided at specified locations, where greenways cross arterials.

Explanation:

Crosswalks and underpasses should be provided for easy and safe pedestrian and bicycle movement across arterials. As part of the Citywide trail network, undercrossings should be provided where "greenways" along creeks, high-voltage power lines and the abandoned YVRR r.o.w. cross arterials. Additional crossings should be provided at Core Commercial areas and signalized intersections.

Justification:

Pedestrians and bicyclists must be permitted to move easily and safely across arterials if an environment that is not reliant on the automobile is to be created. Crosswalks and underpasses will provide direct pedestrian and bicycle connections between Core Commercial areas, employment areas, parks, schools, residential areas and other destinations.

5. Transit System

Guideline 5A:

TRANSIT NETWORK

A transit network should provide convenient and reliable service between Villages, the Comparison Center and office area, the potential University of California campus, Merced College and downtown Merced.

Explanation:

The "M" Street Transitway should provide direct and frequent service to downtown Merced via express buses or light rail. If a University of California Campus is built near Lake Yosemite, a transitway with express bus or light rail service should also extend along Bellevue Road, east of "M" Street. Feeder buses should serve destinations not on transitways with frequent service to a transitway, where a timed transfer can occur.

Justification:

Transit service reduces reliance on the automobile thereby reducing traffic and emissions and providing an inexpensive way for those who cannot drive to get around, such as the elderly, the disabled, teenagers, and those who cannot afford a car.

A network of transitways and feeder buses allows transit connections among residential areas, Core Commercial areas, employment, recreation facilities, high schools and downtown Merced. The transitways create a direct and relatively uninterrupted route to major destinations including downtown Merced, the Community retail center, and other Villages on the transitway. Feeder bus service provides efficient connections between the transitway, Villages, community facilities and other destinations. Timed transfers will reduce travel time. This coordinated system provides a framework for fast and reliable service that can capture significant numbers of trips.

Guideline 5B:

LOCATION OF TRANSIT STOPS

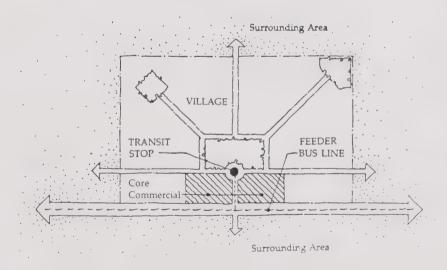
Transit stops should be centrally located within a Village, adjacent to the Core Commercial area and village green. Additional feeder bus stops may be located in Surrounding Areas along connector streets and adjacent to parks and public facilities, when possible.

Explanation:

Transit stops should provide pleasant and convenient access to Village residential and Core Commercial areas. This can be achieved by locating transit stops away from arterials and between Core Commercial areas and village greens.

Justification:

Accessibility and frequent, reliable service are the keys to successful transit ridership. A centrally located transit stop is closest to the greatest number of Village residents and employees, and makes shopping and recreation more convenient when commuting to and from work.



Transit stops should be centrally located within the Villages.

Guideline 5C:

TRANSIT STOP FACILITIES

Core Commercial transit stops should provide shelter for pedestrians, convenient passenger loading zones, and secure bike storage. Shelters should be provided at other transit stops and be consistent with City standards.

Explanation:

Comfortable waiting areas, appropriate for year-round weather conditions, must be provided at all transit stops. Shelters should be designed with passenger safety and comfort in mind, and should be easily recognizable, yet blend with the architecture of the transit station and/or surrounding buildings. Passenger loading zones should be located close to the stop, but should not interfere with the transit stop operations. Secure and safe bicycle storage areas, such as bike lockers, bike racks, or monitored "bike checks," should also be provided. At a minimum, developers will be required to set aside sites for transit stops.

Justification:

Village transit stops are apt to be used a greater portion of the year, and by people using a variety of modes to get to them, than are stops in typical auto-oriented developments. Consequently, transit stop facilities should accommodate and encourage active use by providing year-round shelters, convenient loading zones, and secure bike storage.

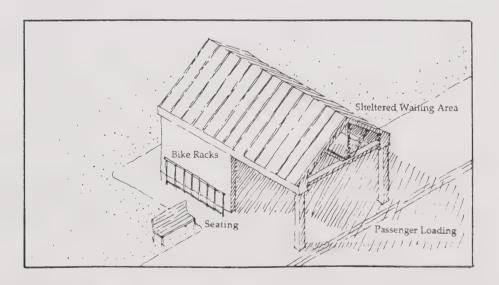


Illustration of basic bus shelter elements.

Guideline 5D:

STREET CROSSINGS TO TRANSIT STOPS

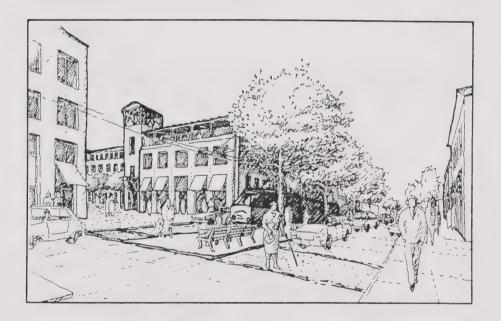
Streets must be designed to facilitate safe pedestrian crossings to transit stops.

Explanation:

Transit passengers are likely to make frequent street crossings, some at mid-block, depending on the location and design of the transit stop. Adjacent street design must recognize the need for easy, safe, and fast pedestrian access, by providing sufficient auto and pedestrian visibility distances, stop signs or manually operated traffic signals, and clearly marked pedestrian crossings.

Justification:

Most people will use transit only if it is frequent, safe, and very convenient. Accessibility to transit stops must be given high priority in the design of streets to promote transit ridership. Street crossing placement, design and markings should recognize the need by transit riders for fast and flexible access to the stop.



Guideline 5E:

PARK AND RIDE LOTS

Surface parking lots specifically devoted to park and ride should not be provided in Villages. Rather, community-serving surface park and ride lots should be located at the ends of transit lines, adjacent to Community Parks along transitways or immediately across arterials from Core Commercial areas along transitways.

Explanation:

Park and ride lots are best located across from Core Commercial areas or transit stops, with less intensive surrounding land uses. Surface parking lots specifically designed for park and ride, should be located across arterials from Core Commercial areas on the "M" Street Transitway with convenient pedestrian access to the transit stop.

Justification:

While park and ride lots are extremely important components to building the ridership of the overall transit system, they do not necessarily augment the uses, activities, and densities of a Village. The location and type of park and ride lots should be considered in terms of the goals and function of the entire transit system and should not detract from the Village concepts.

6. Parking Requirements and Configuration

Guideline 6A:

LOCATION OF PARKING LOTS

Parking lots should not dominate the frontage of pedestrian-oriented streets or street segments, or interrupt major pedestrian routes. Parking lots should be located behind buildings or in the interior of a block whenever possible. Parking lots should not occupy more than 33 percent of the frontage of commercial "main streets," residential streets, and streets in Office areas. This requirement does not apply to auto-oriented segments of streets that are immediately off of arterials, where little pedestrian movement will occur, nor does it apply to streets that pass through travel commercial and industrial areas.

Explanation:

Parking lots that serve buildings facing pedestrian-oriented streets or street segments should be located to the rear of the building. Major anchor retail stores may have deeper parking lots. In no case should parking lots occupy more than 1/3 of the frontage of a pedestrian street or street segment.

Justification:

An active pedestrian environment is stimulated by buildings at the sidewalk with numerous entries and visual stimuli; surface parking lots are "dead" spaces for pedestrians and drain the life of a street. Design solutions are available to integrate parking lots into Villages so that streets are interesting and "friendly" to pedestrians.

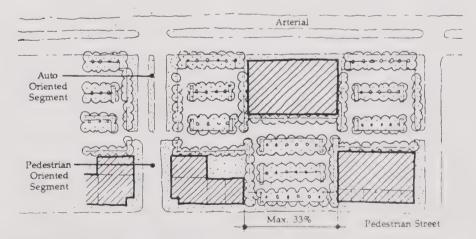


Diagram illustrating a preferred parking lot configuration.

Guideline 6B:

SIZE OF SURFACE PARKING LOTS

The size of any single surface parking lot should be limited to 3 acres, unless divided by a tree-lined street, aisle or building.

Explanation:

Surface parking lots should not be larger than 3 acres, unless it is divided into several pieces. Large parking lots can be successfully separated into smaller units by placing a street through two parking areas or locating a building between parking areas. If a single use will require a surface parking lot in excess of two acres, structured parking should be strongly encouraged.

Justification:

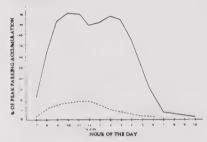
Large parking lots detract from a pedestrian emphasis and dedicate valuable land close to the transit system to non-rider-generating uses. Limiting the size of surface parking lots reduces these problems, while continuing to accommodate the needs of anchor retail tenants.

Guideline 6C:

JOINT USE PARKING

Joint parking allowances are strongly encouraged for nearby uses. Retail, office, entertainment, and some housing should share parking areas and quantities.

OFFICE



RESIDENTIAL



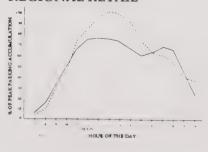
RESTAURANT/LOUNGE



CINEMA



REGIONAL RETAIL



Explanation:

Projects with a mix of uses should seek to reduce the total number of parking spaces by comparing peak demand of each use by time of day, day of the week, and season. Where the varied parking demand for proximate uses allows joint use of a single parking facility, a reduced number of spaces is strongly encouraged. Shared parking areas should be conveniently located to all uses, but do not need to be located on the same parcel as the use. Developers should work with the City to determine precise parking requirements for mixed-use areas. (Shared Parking, a book by the Urban Land Institute, Washington DC, 1983, provides useful methodologies and data for determining parking needs.)

Justification:

Shared parking spaces can serve several land uses in mixed-use areas and reduces the overall amount of parking needed. Because parking demand for various land uses differs during the day, week, and season, fewer spaces are required in mixed-use areas. Furthermore, shared parking encourages multi-purpose trips by taking advantage of the complementary land uses within mixed-use areas, such as Villages. Reducing the amount of land devoted to parking within the Village not only allows more efficient use of land, but also makes transit use easier by minimizing walking distances and reducing the negative impacts of parking on pedestrians.

PARKING ACCUMULATION

---- WEEKDAY

Parking demand varies by time and land use as illustrated by these charts by the Urban Land Institute (Washington DC).

Guideline 6D:

PARKING LOT LANDSCAPING

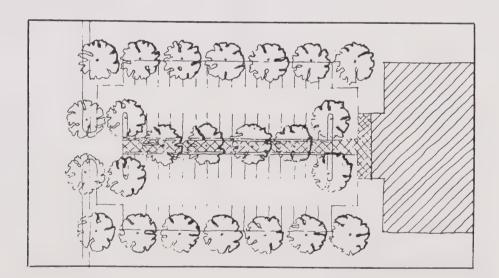
All parking lots must have at least one tree per 6 parking spaces so that within ten years approximately 50 percent of the surface area of the lot is shaded. Additionally, parking lots should be screened from streets by landscape treatments. Views of retail facades should not be blocked by tree canopies.

Explanation:

This parking lot landscaping standard is intended to achieve a quality of environment that is comfortable to pedestrians, rather than planting a specified number of trees that may or may not achieve the desired results. Additional trees should be located along walkways; perimeter landscaping should screen views of cars, but not block views of retail facades. Tree canopies should be trimmed to retain shade, while allowing building visibility.

Justification:

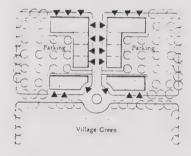
Merced's hot summer climate necessitates extensive landscaping, specifically trees that provide shade and relief from the sun. This is particularly important for surface parking lots which absorb significant amounts of solar heat and create hot, uncomfortable places for pedestrians. Landscaping along roadways should also be provided to soften the visual impact of rows of parked cars and define the edge of the sidewalk.



7. General Built Character

Guideline 7A:

BUILDING ORIENTATION



In general, primary building entrances and active interior areas shall face onto streets and sidewalks to enlivening them with activities and make safe, pleasant walking environments.

Explanation:

With the exception of anchor retail stores, primary building entrances shall be physically and visually oriented toward streets, parks and plazas, not to the interior of blocks or to parking lots or garages. Secondary building entrances oriented toward parking lots are permitted. All streets, except arterials, should have land uses that front onto them. A continuous frontage of rear yards should not occur along non-arterial streets; and sideyards should occur along non-arterial streets only if a street or open cul-de-sac permits visual access and pedestrian movement to the front entry. Streets should not be lined by blank walls or garage doors and should be viewable from active interior spaces to provide informal survaillance of the street.

<u>Iustification</u>:

The configuration of building entrances and overall building form must establish a pedestrian-oriented environment. Orienting buildings to the public street will encourage walking by providing easy pedestrian connections, by bringing activities and visually interesting features to the street, and by enhancing security.

Guideline 7B:

INTENSITIES AND DENSITIES

Building intensities and densities should meet the minimum requirements set forth for Village and Surrounding Areas as required to promote more active centers, to support transit, and to encourage pedestrian-oriented development that fronts onto the street.

Explanation:

Compared with other areas, the Villages should have the highest commercial intensities (the amount of building relative to the size of the site) and the Villages should have the highest densities (the number of dwelling units in a given area). Core Commercial areas should be intensive enough to provide a "main street" shopping spine. Multi-storied buildings and structured parking are strongly encouraged near transit stops to better utilize the lands adjacent to the transit line and to provide additional transit ridership. A development pattern is encouraged where densities are highest at the center of the Village and become lower as the distance from the center increases. Thus higher density housing types such as apartments and townhouses are most appropriate adjacent to the Core, with lower density single family housing placed further out.

As Merced continues to grow, land economics may make future intensification desirable. Commercial area development plans should include long-term strategies for additional stories and buildings, as well as structured parking. Residential infill should also be possible by permitting ancillary dwelling units.

Justification:

Building must be of a sufficient intensity and density to create safe and active streets enhanced by a sense of enclosure and visual interest, and to support transit and the provision of nearby goods and services. Upper story uses provide watchful eyes on the street and activity day and night. Transit systems need moderate-to-high intensities and densities surrounding them to support frequent and convenient service. Retail centers can also provide a greater variety of goods and services if greater numbers of residents and employees are within close proximity.

Guideline 7C:

ARCHITECTURAL CHARACTER







Buildings should create visually pleasing, human-scaled environments that reinforce the identity of the various uses and express the importance of the Village centers and civic buildings.

Explanation:

No project should appear to dominate an entire street or block. Variations in floor level, facades, roof forms and architectural details that create the appearance of several smaller projects are strongly encouraged, but should not detract from an overall sense of continuity created through massing, roof types and materials.

Building materials should convey durability and permanence, and should be suited to Merced's climate. Building materials such as concrete, stucco, masonry, tile, stone and wood should be used to the greatest extent possible. Glass curtain walls and all reflective glass should not be used. Shading devices and techniques should be used to reduce interior glare, conserve energy and contribute to visual interest.

Building heights that transition gradually from perimeter areas to the Core Commercial and Office areas are encouraged. Special buildings, such as community centers, schools and theaters should have ornamental and vertical elements to communicate their civic importance.

<u>Iustification</u>:

The architectural character of development in growth areas should reinforce the town-like qualities of the Village Concept by creating identifiable centers and establishing neighborhoods with human-scaled, regional architecture.

Guideline 7D:

LANDSCAPING

Landscape elements such as trees, trellises, arbors, water features, amphitheaters, plazas, and courtyards should be used to enhance public spaces, pedestrian paths and building entrances. Drought tolerant plants are encouraged for landscaped areas. Areas that require irrigation should use water conserving features and systems, when practical.

Explanation:

Landscape elements should be used to provide relief from summer heat, create visual interest and to reinforce patterns of use. Trees, trellises, and arbors should be used along sidewalks and across parking lots to provide protection from the sun and create a pleasant canopy. Plazas and courtyards should be located near office entrances and within Core areas. Water features (with recirculated water) and amphitheatres may be used to mark places of civic importance. Street trees should be planted along streets.

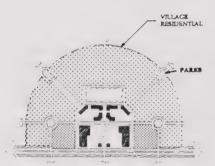
Justification:

Landscape elements encourage walking and bicycling by making it more enjoyable. They also help establish an identity in growth areas through streetscape and open space design. Drought tolerant plants can be used in areas to reduce water consumption and maintenance.

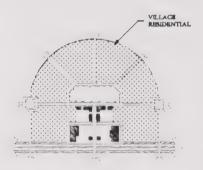
8. Commercial Intensities, Siting, and Design

Guideline 8A:

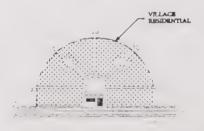
CORE
COMMERCIAL AREAS



Comparison Center



Neighborhood Center



Convenience Center

Each Village must have a mixed-use Core Commercial area containing ground floor retail and commercial space, including: Convenience Centers (1.5 to 3 acres), Neighborhood Centers (8 to 12 acres), and Comparison Centers (20 to 30 acres).

Explanation:

Core Commercial areas are required in every Village and must be adjacent to a future transit stop. Street-level retail space should form a pedestrian-oriented "main street" that is accessible from the surrounding Village without using an arterial road. Shopping malls and centers should face shops onto streets that connect to the surrounding neighborhood without large intervening parking lots. The design of Core Commercial areas should encourage shopping enroute to the transit stop or by office workers during the day.

The size and uses in each Core area can vary, depending on the size, location, and Village's function in the region. At a minimum, it should serve as a transit destination and convenience shopping area for Village and Surrounding Area residents, and can contain professional offices as well as retail uses. The Comparison Retail Center will create the largest retail, office and entertainment focus outside of the current City. The Comparison Retail Center should concentrate a diverse set of major commercial and civic uses such as junior department stores, discount stores, cinemas, restaurants, health clubs, grocery stores, drug stores, hardware stores, public offices, and day care. A large-scale Office area is to be located across an arterial road from the Comparison Retail Center. Neighborhood Retail Centers should serve the growth area with major grocery stores, drug stores, ancillary shops and professional offices. Small-scale Office-Commercial uses may be located across arterial roads from Neighborhood Retail Centers. Convenience Retail Centers should provide convenience "mini-markets" and some ancillary commercial uses. Convenience Retail Centers must not contain major anchor stores.

<u>Iustification</u>:

A Village must have sufficient retail and commercial space to provide useful opportunities for residents and employees to run errands. Without shopping opportunities within convenient walking distance, residents and workers will use cars for more trips and will lose an incentive to use transit. The size and character of Core Commercial areas varies to ensure their economic viability and to give each Village a distinct character.

Guideline 8B:

CORE COMMERCIAL INTENSITIES

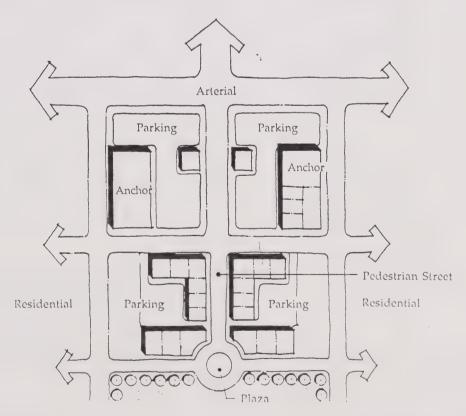
Core Commercial areas must be developed at sufficient intensity to create a focus of activity at the center of Villages and should be built at a F.A.R. of at least 0.25. (F.A.R.s or Floor Area Ratios are the ratio of the total floor area to the lot area, excluding public streets.) Second and third floor uses are encouraged, but must be provided in addition to this minimum requirement.

Explanation:

The minimum F.A.R. can be achieved with a mix of traditional retail, resident-serving offices and entertainment uses. Office and residential uses over ground floor retail is encouraged. Joint use parking should be provided wherever possible, making higher intensities feasible. Structured parking is also encouraged and should be considered in the design of Core Commercial areas, even if implemented in later phases.

Justification:

The minimum F.A.R. encourages the creation of a pedestrian-oriented Village center by requiring efficient single story commercial retail space with accompanying surface parking lots, while allowing higher density retail with structured parking, and office or residential uses on upper floors. Office and residential uses on upper floors make more active Village centers.



A Floor Area Ratio (F.A.R.) of approximately 0.25 is illustrated by this Core Commercial area diagram.

Guideline 8C:

OFFICE AND
OFFICE COMMERCIAL
INTENSITIES

Office and Office-Commercial areas should be built at an intensity that concentrates activity near transit stops and Core Commercial areas. An F.A.R. of 0.35 to 0.60 is encouraged without structured parking and may be as high as 1.00 F.A.R. with structured parking. Larger Office areas should be located across from the Comparison Retail Centers. Smaller Office-Commercial areas should be located across from Neighborhood Retail Centers.

Explanation:

In most cases offices will be developed with surface parking. As land values rise in Merced, structured parking will become economically feasible. This guideline encourages development of multi-story buildings with structured parking, thereby allowing more efficient use of land near transit stops.

Larger Office areas should be at least 10 acres and should be located across arterials from the Comparison Retail Center. Smaller Office-Commercial areas should be located across from Neighborhood Retail Centers and should be less than 5 acres and under 250 feet in depth. Office-Commercial areas may also contain gas stations, car washes and fast food restaurants; most auto-oriented uses should be concentrated in Travel Commercial areas, however. Professional office uses are permitted in Core Commercial areas.

Justification:

Office areas should promote efficient utilization of land near transit stops. Office areas should be located near the Comparison Retail Center to create a major focus of reinforcing uses in the study area. Smaller Office-Commercial areas are limited in depth to create opportunities for small businesses on smaller lots in close proximity to retail and transit.

Guideline 8D:

TRAVEL COMMERCIAL AND LIGHT INDUSTRIAL INTENSITIES

Travel Commercial areas include auto-oriented land uses such as: gas stations, motels and hotels, car washes, building materials, fast food restaurants and automobile service, repair and supply. Light Industrial uses include areas used for assembly and manufacturing.

Explanation:

Travel Commercial development requires large areas for parking, loading, storage and staging areas. As a consequence they tend to be built at low intensities, and are generally not suited to the pedestrian-oriented environments surrounding Villages. Travel Commercial areas are best situated adjacent to Highway 59 with access set at least 800' from freeway interchange ramps.

Justification:

Travel Commercial areas provide essential services to residents, employees and visitors, but because of their auto-emphasis they tend to have low F.A.R.'s and are generally not pedestrian-oriented. Light Industrial areas provide employment in areas that have existing industrial activities or may be effected by the location of freeways and residential areas.

Guideline 8E:

CORE COMMERCIAL CONFIGURATION

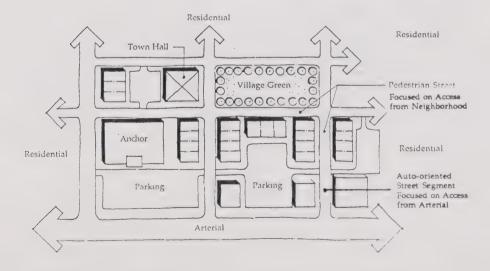
The configuration of shops in the Core area must seek a balance between pedestrian and auto comfort, visibility, and accessibility. While anchor stores may orient to arterial streets and parking lots, smaller shops must orient to pedestrian "main streets" and plazas.

Explanation:

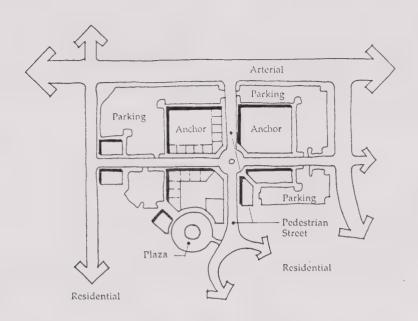
Core Commercial areas should be configured to allow standard parking quantities, access and visibility for the car, as well as a providing convenient paths for local pedestrians. The Core Commercial area's configurations should allow local residents to walk and drive to shopping and transit stops without using arterials. Often, the smaller shops can turn to form a "main street" with streetside parking and parking lots behind the shops to form a pleasant place to walk. Simultaneously, the edge of the Core fronting the arterial may house larger parking areas and anchor stores in a location visible from arterials. Anchor stores are encouraged to provide entries to their parking lot and to the pedestrian-oriented shopping street.

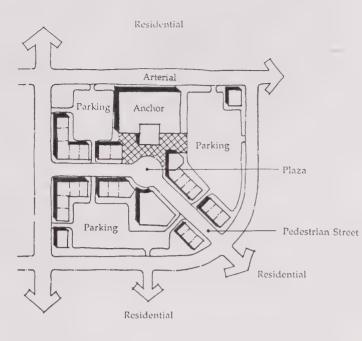
<u>Iustification</u>:

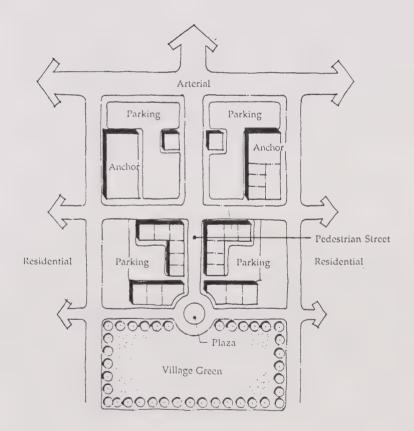
In conventional suburban retail centers shops are oriented entirely to the automobile and parking. Minor modifications to conventional retail configurations permit village core commercial areas to attract a more diverse patronage, both from the traditional auto/anchor and from the walk-in neighborhood and transit activity. Configurations which provide traditional "main street" sidewalk storefronts in combination with arterial-oriented anchors can provide for both pedestrian and auto accessibility.

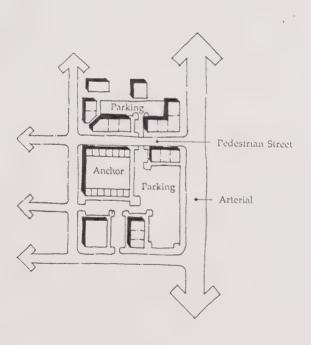


An example of an acceptable Core Commercial area configuration.









Many Core Commercial configurations are acceptable, as long as buildings are oriented toward plazas, and pedestrian-oriented streets and street segments.

Guideline 8F:

COMMERCIAL BUILDING SETBACKS

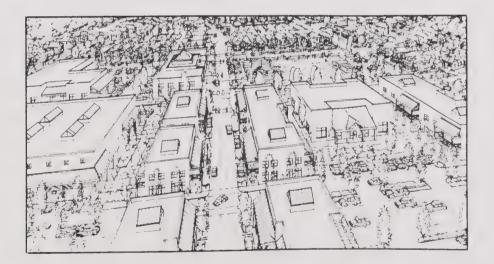
Building setbacks from non-arterial streets should be minimized. Setbacks should reflect the desired character of the area and bring buildings close to the sidewalk.

Explanation:

Buildings in Core Commercial area should build to non-arterial streets and the sidewalk edge whenever possible, except for anchor tenants that may require larger setbacks. Parking areas or garages should be recessed or placed to the rear of buildings, in clustered parking areas and along alleys. Larger setbacks of up to 20 feet should be permitted in Office and Office-Commercial areas, and for outdoor cafes in Core Commercial areas. Travel Commercial buildings may be setback more than 20 feet, however smaller setbacks are encouraged.

Justification:

The street and sidewalk is the main pedestrian activity center. Minimal setbacks bring buildings close to the street and the pedestrians. This "main street" configuration enlivens commercial areas by encouraging window shopping and streetside activity.



Guideline 8G:

COMMERCIAL BUILDING FACADES

Commercial building facades should be visually accentuated with various architectural elements such as arcades, porches, bays, and balconies to enhance the pedestrians' environment. Street level windows and numerous building entries are required in the Core Commercial area. In no case shall the facade of a building consist of an unarticulated blank wall or an unbroken series of garage doors.

Explanation:

Buildings should incorporate design elements that draw in pedestrians and reinforce street activity, especially along "main streets". Anchor retail tenants should be encouraged to add small-scale retail uses on building frontages. Commercial facades should vary from one building to the next, rather than create an overly unified frontage. Monotonous and undifferentiated commercial facades should be avoided; variations in floor level, facades, roof forms and architectural details that create the appearance of several smaller projects are strongly encouraged.

<u>Justification</u>:

Streets with few entries, and monotonous and unarticulated building frontages are not conducive to pedestrian activity and make walking and shopping less appealing. Attractive streetside buildings should encourage foot traffic and people-watching from outdoor seating areas.

Guideline 8H:

BUILDING HEIGHTS

Commercial building heights in Core Commercial areas should not exceed 3 1/2 stories in the Comparison Center and office areas, and 3 stories in other commercial areas.

Explanation:

Building heights should gradually transition from perimeter areas to the Core Commercial areas, with the Core Commercial area serving as the visual focal point of the Village. The Comparison Center and office areas have greater permitted building heights to underscore the regional importance of these areas and to provide greater intensity and activity.

Justification:

Commercial building heights should reflect the desired character in each area and should gradually transition from the heights of buildings in adjacent areas to maximum building heights in the commercial Core area.

Guideline 8I:

COMMERCIAL BUILDING ENTRIES

Primary ground floor commercial building entrances should orient to plazas, parks, or pedestrian-oriented streets, not to interior blocks or parking lots, except for anchor retail buildings, which may have their entries from off-street parking lots. On-street anchor street entries are strongly encouraged, however. Secondary entries from the interior of a block should be allowed.

Explanation:

Entries into small shops and offices should orient directly onto a pedestrian-oriented street. Buildings with multiple retail tenants should have numerous entries to the street; small single entry malls will be discouraged. Off-street parking should also be located at the rear of buildings with "paseos" or short, pleasant passageways leading to the pedestrian-oriented street and primary entrances.

Some retail anchor stores (above 30,000 s.f.), such as neighborhood grocery stores, need parking lot access to the primary entry. This is conditionally permitted if pedestrian access to the entry is provided from the street and pedestrians are not required to walk from street sidewalks through the parking lot to enter the store. Along walls without entries, building elevations must include windows, display areas, and/or be lined with small retail shops.

<u>Iustification</u>:

Entries oriented to parking lots steal activity and life from public streets. Entries oriented to public streets help to create a walkable, pedestrian-oriented environment that will encourage people to come on foot and reduce the number of trips traveled by car.

Guideline 8J:

UPPER STORY USES IN CORE COMMERCIAL AREAS

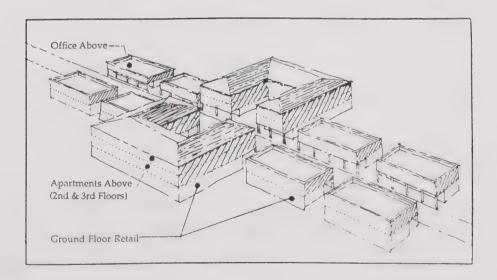
Two- and three-story buildings are encouraged in the Core Commercial areas. Upper floors may contain residential or office uses. The intensity of the retail use must not be reduced and the buildings must be consistent with the design guidelines.

Explanation:

Retail developments in the Core Commercial area may add two additional floors of residential and/or office uses. Additional office and residential uses in the Core Commercial areas are encouraged as long as retail uses and activities are maintained. Special care must be given to the design of residential units to ensure privacy and security.

Justification:

Additional upper floors with residential or office uses provide visual interest, a more urban character, street security at night, and concentrated pedestrian activity. In addition, second and third story residential and/or office space can support transit and shops by bringing a greater number of lunch-time and after-work shoppers.



Optional upper-story uses are encouraged in Core Commercial areas.

9. Residential Densities, Siting, and Design

Guideline 9A:

RESIDENTIAL MIX

A mix of residential densities, ownership patterns, cost, and building types is desirable in Villages and Surrounding Areas.

Explanation:

While each Village and Surrounding Area will take on a different character and will have a different proportion of single-family and multi-family densities, care should be taken to provide a variety of housing types, costs, and ownership opportunities within each Village. The residential portion of the Village can be a combination of small-lot single-family units, duplexes, townhouses, and up to three-story apartment buildings. Surrounding Areas provide opportunities to develop other lower density housing types.

Justification:

For Villages to be affordable to the diverse range of households moving to Merced, Villages must provide a mix of housing types. Presently, the strongest market and the vast majority of homes in the region are privately-owned single-family units. Higher density townhouses and multi-family units are, however, gaining an increasing proportion of the market. The range of permissible residential densities in Villages and Surrounding Areas can accommodate all of these household needs.

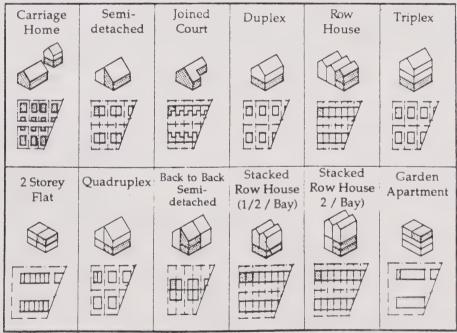


Diagram by Jack Diamond

A variety of housing types are encouraged.

Guideline 9B:

RESIDENTIAL DENSITIES

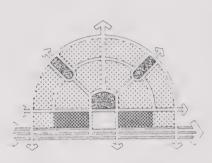
Gross residential densities within Village sites must be a minimum of 7 units per acre, an average of at least 10 units per acre, and a maximum of 30 units per acre. Gross residential densities within Surrounding Areas must have a minimum average density of 5 units per acre with a minimum of 2 units per acre.



Explanation:

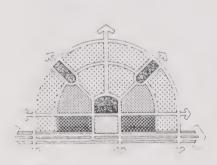
A range of densities and dwelling types are permitted in Village and Surrounding Areas. These gross density requirements must be met to ensure the viability of transit and retail centers, as well as providing housing opportunities for a range of households. (Gross density calculations should include the area in lots as well as in streets and alleys immediately in front and behind the lots, except where existing property configurations and site constraints reduce effective densities.)

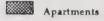
Many single-family residential types will meet this requirement, especially if ancillary units are used. Many multi-family housing types are permitted in Villages; duplex and triplex units are permitted in Surrounding Areas. The range of permissible housing types are illustrated in the following guidelines.



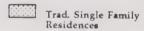
Justification:

The minimum average densities encourage transit ridership, as well as provide a range of housing types that are affordable and marketable to a variety of households. Studies by many transit agencies show that transit systems typically need a minimum average residential density of 10 units per acre in Villages and a minimum average density of 5 units per acre in Surrounding Areas to support frequent and convenient transit service and Core Commercial areas. The permissible density ranges permit a flexibility to respond to market conditions, and encourage a mix of housing types.





Townhouse/ Carriage House



Housing Mix Alternatives 10 Dwelling Units/ Acre Average

Note:

These housing mix diagrams illustrate various ways in which an average density of 10 du/ac can be achieved. They are intended to clarify land use planning principles only and are not meant to represent specific area plans.

Guideline 9C:

SINGLE-FAMILY HOUSING TYPES

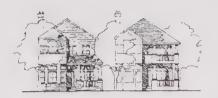
Single-family residential types cover a wide range of densities. They should enhance the pedestrian-oriented character of Villages and Surrounding Areas. Single-family types illustrated here include: zero-lot line homes, small-lot single family, standard-lot single family and estate residences. Ancillary units may be used in single-family areas.

Explanation

Single-family housing types should create a high-quality, pedestrian oriented environment, as illustrated by the following housing types.

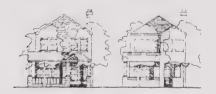
Zero-Lot Line Homes

Zero-lot line homes are detached single-family dwellings with only one private side yard. Zero-lot line homes have three sides with windows and one blank wall set to a side property line. (The blank wall provides privacy for the neighbor's side yard.) Zero-lot line homes may be built at gross densities ranging from about 7 to 10 dwelling units per acre (du/ac). Ancillary units can increase this density by 75% to a maximum of 17.5 du/ac.



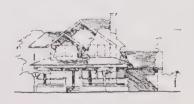
Small-Lot Single-Family Homes

Small-lot single-family homes have side setbacks on both sides, thereby allowing windows to occur on all sides. Efficient lotting of small-lot single-family homes can result in gross densities of about 6 to 8 du/ac. Ancillary units can increase this density by 75% to a maximum of 14 du/ac.



Standard Lot Single Family Homes

Standard-lot single-family homes are similar to Small-lot single-family homes except for larger lot sizes. Standard-lot single-family homes may be built at gross densities of between 2 to 6 du/ac. Ancillary units in the rear can increase this density by 75% to a maximum of 10.5 du/ac.



Estate Residences

Estate residences have very large lots sizes and may be built at gross densities of up to 2 du/ac. Ancillary units can increase this density by 75% to a maximum of 3.5 du/ac.

Guideline 9D:

ANCILLARY UNITS

GARACE OR CARRIACE HOUSE:
1-2 STORIES
FRONT HOUSE:
2-3 STORIES
STREET
ALLEY

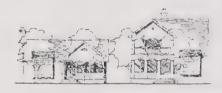
Ancillary units or 'granny flats' are encouraged in association with single-family residences. They may be counted as 3/4 of a unit to meet density requirements. Carriage houses, ancillary units situated above garages, are encouraged.

Explanation:

Ancillary or second units create affordable rental units without changing the quality of single-family areas. They can also serve to offset housing costs for the primary unit, or provide needed space for a teenager or elderly family member. Ancillary units can be provided in Village and Secondary residential areas, either as part of the primary home or above a garage.

Carriage Houses are ancillary units built over detached garages at the rear of lots and accessed by alleys or side drives. Carriage Houses may occur in combination with any of the following housing types: Zero-Lot Line, Small Lot Single-Family, Standard Lot Single-Family and Estate Residential.

<u>Iustification</u>



Ancillary units, such as carriage houses, increase the overall density of an area, while maintaining its single-family character and ownership patterns. These "granny units" can be rented to off-set housing costs for the primary unit. They can also provide needed space for a teenage or elderly family member, or they can serve as a studio or office. Ancillary units will be calculated as 3/4 unit per lot. The following table illustrates the density bonus received when ancillary units are provided.

Lot	Size	Density Without	Density With
Location		Without Second Unit	Second Unit
Village	32' x 100'	10 du/gross ac 7 du/gross ac 6 du/gross ac 5 du/gross ac	17.50 du/gross ac
Village	45' x 100'		12.25 du/gross ac
Surrounding Area	50' x 100'		10.50 du/gross ac
Surrounding Area	65' x 100'		8.75 du/gross ac

Guideline 9E:

MULTI-FAMILY HOUSING TYPES

Multi-family housing types should be varied in character and enhance the pedestrian-oriented character of Villages. Multi-family housing types illustrated here cover a range of densities and include: podium apartments, garden apartments, small multiplexes and townhomes. Duplexes and triplexes (two and three unit multiplexes) are the only multi-family housing types permitted in Surrounding Areas.

Explanation

Multi-family types include housing with stacked and/or attached units, as illustrated by the following housing types. Several multi-family types can be consistent with the preceding guidelines and used to create a high-quality, pedestrian-oriented environment. These types may be rented or owned.

Podium Apartments



Podium apartments contain attached and stacked units above a structural platform or "podium" with a parking garage provided below. Shared stairs lead from the garage to the street or to the podium, where paths lead to units and shared stairs to upper units. Podiums should be not more than 5 feet above finished grade to allow direct access to first floor units and to permit visual access to the street, unless flooding conditions preclude this arrangement. Because of their compact arrangement, podium apartments can generally be built at densities ranging from 20 to 30 units per acre.

Garden Apartments



Garden apartments contain attached and stacked units with surface parking lots. Shared stairs, accessible from public streets, provide access to the upper-floor units of Garden apartments, while ground-level units should have entrances directly off of public streets. Garden apartments may be built at gross densities ranging from 16 to 22 du/ac.

Small Multiplexes



Small multiplexes have 2-6 units contained in a building that has many of the aesthetic and functional qualities of single-family houses. Units may be rented or owned. While units are attached and may be stacked, the overall form of the building can bear a strong resemblance to large traditional homes. Small multiplexes may have mirror-image plans or asymmetrical arrangements, where some entries face a sideyard. Every dwelling unit should have direct access to the street and private open space. A "main entrance" should always face and be visible from a public street and be articulated with a porch. Upper floor units should have entry stairs extending to grade. Side entrances should be visible from the street. Multiplexes may be built at gross densities ranging from 10 to 18 du/ac.

Townhomes



Townhomes are a traditional housing type found in many older towns and villages. Townhomes are attached at their sides in groups of three or more. Each unit has its own front yard and entrance, as well as a private back yard. Because there is only one unit per lot, townhomes tend to be owner-occupied. Townhomes may be built at gross densities ranging from 10 to 20 du/ac.

Guideline 9F:

RESIDENTIAL BUILDING SETBACKS

Residential building setbacks from public streets should be minimized, while maintaining privacy. Minimum and maximum front setbacks should be established that reflect the desired character of an area and ensure that residences address streets and sidewalks.

Explanation:

In most residential areas, building setbacks should be between 10 and 20 feet at back of sidewalk. If apartments occur over first floor commercial space, no setback is required. Estate Residences (less than 2 du/ac) may be setback as much as 30 feet.

Porches, bays and balconies should be allowed to project into these setbacks to contribute to a street's human scale and activity.

Justification:

In residential areas, minimal front yard setbacks encourage recessed garages and dedicate a greater portion of the lot to private back yards. Reduced setbacks also create safer and more active streets. Residents can more easily watch over the street and know their neighbors.



Guideline 9G:

RESIDENTIAL BUILDING HEIGHTS

Multi-family residential types should not exceed 3 1/2 stories. Single-family residences should not exceed 2 1/2 stories.

Explanation:

Building heights should gradually transition from perimeter areas to the Core area, with the Core area serving as the visual focal point of the Village. Heights should be greatest adjacent to Core Commercial areas and across from parks. Construction of residential buildings over underground or partially underground parking structures is encouraged. Vertical projections above the main building volume such as chimneys, roof peaks and cupolas are also encouraged.

Justification:

Villages are designed to fit with and complement existing development patterns in the City of Merced and at the same time represent a new type of development. Accordingly, Village building heights should reflect the desired character of an area and emphasize important public spaces. Heights should transition from maximum building heights in Core Commercial areas to low heights in remote areas.

Guideline 9H:

RESIDENTIAL BUILDING FACADES

The exterior of buildings or facades should be varied and articulated to provide visual interest to pedestrians. Frequent building entries and windows should face the street. Front porches, bays, and balconies are encouraged. In no case shall a facade of a building consist of an unarticulated blank wall or an unbroken series of garage doors.

Explanation:

Varied and human-scaled building facades are key to making a place "pedestrian-oriented." Building designs should provide a high level of visual interest, without creating a chaotic image. Residences should include design elements that enhance the streetscape and address or front the street. Facades should vary from one building to the next to avoid a monotonous streetscape. Trellises and overhangs are encouraged as ways of combatting Merced's summer heat.

Justification:

Varied and human-scaled facades enhance pedestrians' visual interest and sense of security along streets. Streets with monotonous and unarticulated building frontages make walking less appealing and are not conducive to pedestrian activity. Quality construction and materials further contribute to the neighborhood as a pleasant place.

Guideline 9I:

RESIDENTIAL BUILDING ENTRIES

In all cases, primary ground floor residential building entrances should face and be visible from the street, instead of parking lots and driveways in the interior of blocks. Secondary and upper floor entries from the interior of a block will be allowed; however, front and side entries to upper units that are visible from the street are preferred.

Explanation:

In residential areas, the front door and guest entry should orient to the street. Private back door entries can provide access from alleys, garages, and parking lots. Ancillary units and upper floor units in multi-family or apartment complexes may be accessed by rear or side entries.

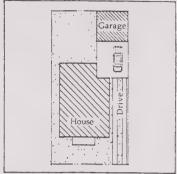
Justification:

Residential entries should face the street to encourage neighborhood activity, and make streets safer and more pleasant. In addition, visitors walking or parking along the street will be welcomed by this visible and legible pattern of entries.



Guideline 9J:

RESIDENTIAL GARAGES



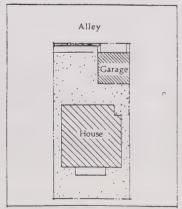
Side Drive (Detached)



Side Drive (Attached)



Modified Front Garage



Alley (Attached or Detached)

Residential garages should be designed to reduce the visual impact of the auto and to line the street with active, visually interesting features. The garage should be set back behind the front facade of the residential building. Garages may be sited in several acceptable ways: in the rear and accessed from an alley, or in the rear and accessed from a side drive. When the street frontage is sufficiently wide, garages may be sited to the side, but should be recessed behind architectural features and the front facade by at least 5 feet and at least 20 feet from sidewalks.

Explanation:

Garages for most housing types should be sited away from the street behind or below residential buildings. When a housing type has a wide street frontage the garage may be sited to the side, but must be recessed. Rural estates may have garages in front of the house, if a carriage house is provided above and garage doors do not face the street.

Where flooding is not an overriding concern and garages are located below residences, they should be depressed so that the first floor of residences is not more than 5 feet above finish grade.

<u>Justification:</u>

An active, pleasant and safe pedestrian environment is created along streets when residences face the street directly. By setting garages away from the street, more active living areas can overlook the street, thereby enlivening the street and allowing residents to keep a watchful eye on playing children and neighborhood activity. This configuration also creates a more human-scaled and less monotonous environment by minimizing the visual impact of large, blank garage doors and by enclosing the street with a variety of architectural elements, such as windows, bays and porches.

10. Public and Semi-Public Siting and Design

Guideline 10A:

PUBLIC AND SEMI-PUBLIC USES

The public use component of Villages and Surrounding Areas should contain parks, plazas, and public buildings such as a town hall, community building, recreation facility, post office, and libraries. (Space within community buildings may be leased for day care.) Developers should work with City agencies to determine needed locations for future public parks, plazas and buildings, and conditions for their provision.

Explanation:

Villages and Surrounding Areas will require inclusion of civic buildings and public facilities. Public service providers are encouraged to make every effort to place new facilities in Villages so as to provide a transit travel option for patrons. Public buildings should be placed in central locations, in highly visible focal points, or adjacent to public parks and plazas. Civic uses such as an urban plaza, community center, post office, and library, are best located in the Core area in conjunction with retail businesses and offices. Recreation-oriented uses, such as parks, recreation facilities, and community buildings should be centrally located with easy access from both residential and Village Core areas. In all cases, parks and plazas must be provided. Roadways and park and ride facilities are not applicable towards this requirement.

Justification:

The structure of a Village is built around accessible and convenient public facilities and spaces. A strong sense of community, participation, identity, and conviviality is important to support the sense of safety and comfort within a Village. Public uses in Villages serve this role by providing community services and meeting places, as well as attracting added retail businesses by allowing convenient doubling up of business and shopping trips. Common public open spaces, such as parks and plazas, provide both recreational and visual amenities.

Guideline 10B:

COMMUNITY SERVICES

Civic services, such as community buildings, recreation centers, post offices, libraries and day care, should be placed in central locations as highly visible focal points.

Explanation:

Community centers, libraries, and police, fire and postal stations should be located in village greens adjacent to retail businesses and offices. The green associated with the Comparison Center near the center of the study area is the most appropriate location for major public buildings, such as a library. Day care should also be located near village greens or neighborhood parks in adjacent retail areas or in leased space within community centers.

Major entries should face public streets and be articulated architecturally. The building and architectural features should be sited to take advantage of vistas along streets, to visually connect these civic buildings with their surrounding neighborhood. Major public buildings should have a civic presence enhanced by their height, mass and materials. Construction and materials should convey a sense of permanence and importance.

Justification:

Community buildings can enhance the emerging identity of the growth area. Civic structures will contribute to the level of activity in Village centers and encourage walking and transit use by patrons and employees. Community buildings associated with parks can contribute to the identifying aspects of Surrounding Area neighborhoods as well. These parks and community buildings will help to differentiate one neighborhood from the next, and help to create a node of activity apart from the Village centers. The architectural quality of community buildings can enhance the civic importance of these buildings.



Guideline 10C:

PUBLIC SCHOOLS

Schools should be sited in a way that minimizes the need for students to cross arterial streets and provides opportunities to use pedestrian trails and bicycle routes to and from school. Schools should also be designed to communicate their civic importance.

Explanation:

Schools should be located on or near a "greenway" bicycle and pedestrian trail to provide safe and convenient access to school. Elementary schools should be distributed so few students have to cross arterials. Junior high school and senior high schools should be distributed to minimize the need for busing. High school site should be served by transit.

School buildings should be sited adjacent to neighborhood parks wherever possible. Elementary school locations are encouraged in Surrounding Areas just outside Villages or on sites adjacent to special features such as creeks or major trees. All schools should be sited away from power lines per school district requirements.

Parking should be located away from public streets. Shared parking between schools and parks may be used to reduce the overall number of spaces needed. The civic presence of schools should be enhanced through their height, mass and architectural features and materials. Schools should be sited to take advantage of street vistas that terminate near the site.

Justification:

Students should be able to easily walk or ride a bike to school. Most students should be able to get to elementary school without crossing an arterial.

Guideline 10D:

DAY CARE

Sites for pre-school day care facilities should be permitted within or adjacent to Core Commercial and Office areas, as well as next to parks. Leasing facilities for day care in community buildings is encouraged.

Explanation:

Day care facilities should be convenient and accessible to Villages and surrounding area residents and employees. Day care sites should be located adjacent to parks, Core Commercial and Office areas. Day care facilities for school-age children near school sites are encouraged.

<u>Iustification</u>:

Household demographics in Merced are changing and becoming more diverse. More households are and will be headed by single parents or double-income parents, creating a strong demand for child care services. A basic objective of the Village concept is to provide housing opportunities for a variety of household types, and day care facilities are increasingly a necessary daily part of residents' lives. Additionally, many parents now lengthen early morning and evening auto trips by driving to a child care facility before continuing on to their destination. Locating child care facilities in Villages will not only provide a necessary service, but will reduce vehicle-miles driven.

Guideline 10E:

OUASI-PUBLIC USES

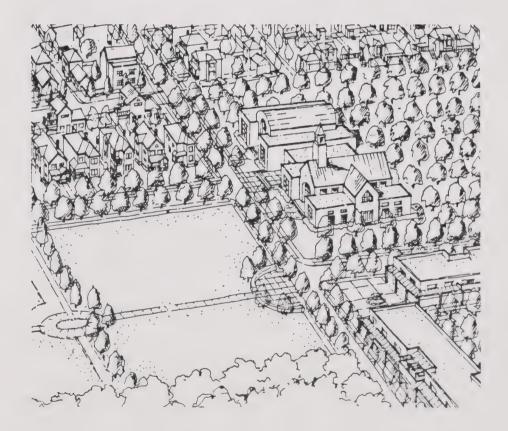
Quasi-Public buildings such as religious buildings, fraternal halls and private schools are encouraged to be situated and designed to face neighborhood parks or village greens.

Explanation:

Religious buildings, fraternal halls and other quasi-public buildings are encouraged to be sited adjacent to neighborhood parks, with entrances in front and parking to the rear or side, or below the building. The civic importance of these buildings should be enhanced through their height, mass and architectural features and materials.

Justification:

Quasi-public uses can contribute to the identity of newly developed areas through careful siting and quality architecture.



Guideline 10F:

UTILITIES

Utility facilities such as wells, pump stations, and electrical substations should be located outside of Villages in sites poorly suited for other forms of development, such as small sites bounded by high-voltage power lines and arterials streets. Utility facilities should be screened by dense vegetation or architectural features.

Explanation:

The study area contains several areas that are poorly suited to residential and other uses, but could be used efficiently as locations for utility facilities. Locations adjacent to arterials may be desirable but should be accessible by local streets and should be designed to accommodate needed equipment.

<u>Iustification</u>:

Placing utility facilities in areas constrained by high-voltage power lines and arterials avoids potential nuisances for surrounding uses and permits a more coherent pattern of development in other areas.

11. Open Space, Parks and Plazas

Guideline 11A:

OPEN SPACE NETWORK

Overall, a total of 5 acres of parkland should be provided per 1000 residents in the growth area, of which 1.5 acres should be in community park and 3.5 acres should be in various forms of neighborhood parks, including village parks, village greens, school parks and other neighborhood parks. "Greenway" trails should provide bicycle and pedestrian access throughout the growth area.

Explanation:

The location of parks, plazas and trails should be coordinated to distribute a variety of recreation opportunities throughout the growth area. Parks should be located near greenways wherever possible to provide good access on foot or by bicycle. Greenways should be provided along open space corridors poorly suited for development and should not be counted towards park acreage requirements

Park Tupe

Area Required ver 1000 Residents

Community Park

1.5 acres

Neighborhood Park (includes village parks, village greens, school parks and other Surrounding Area neighborhood parks) 3.5 acres

Justification

Residents and employees in the growth area should not have to go far to enjoy public open space. A City-wide network of greenway trails and parklands will provide safe and convenient access to a wide range of recreational opportunities, employment, and other uses. The amount of parkland required is within the range recommended by the State of California and continues Merced's tradition for excellent recreational opportunities.

Guideline 11B:

GREENWAYS

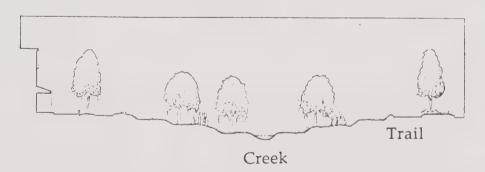
"Greenways" should be created along creeks, high-voltage power lines, the "M" Street Transitway and approximately along the abandoned Yosemite Valley Railroad (YVRR) r.o.w. Greenways shall include a trail or trails for bicycles and pedestrians. They should provide easy access to parks and schools that abut them and should include safe signalized or underpass crossings at arterial roads.

Explanation:

Major creeks, high-voltage power line row's, and the "M" Street Transitway should be maintained with trails to serve residents, employees and visitors. A greenway should also be created approximately following the abandoned YVRR r.o.w. alignment and could include signs describing the YVRR's history; this greenway may be realigned to respond to development considerations, but should form a continuous, non-circuitous north-south route crossing arterials where the YVRR r.o.w. now exists, and connect with parks and schools in the vicinity. Major creeks include those where channelization projects are planned and significant riparian vegetation is present in places; Fahrens and Cottonwood Creeks must include setbacks sufficient to protect sensitive habitats and provide bicycle trails and foot paths. High-voltage powerline r.o.w.'s must be maintained as open space and should be made into pleasant trail corridors through thoughtful landscaping. The "M" Street Transitway should include special bicycle paths and landscaping.

Justification:

Greenways establish an important network of trails and open space serving bicyclists and pedestrians, often using areas that are inappropriate for other uses. Because they will be generally separated from automobile traffic and be pleasantly landscaped, the greenways will encourage walking and bicycling, as well as provide viable alternatives to the automobile. Greenways also provide a safe route for children traveling to and from parks and schools, as well as an efficient way to commute by bicycle.



Guideline 11C:

PARK AND PLAZA DESIGN Public parks and plazas should be designed for both active and passive uses. They should reflect and reinforce the character of the surrounding area.

Explanation:

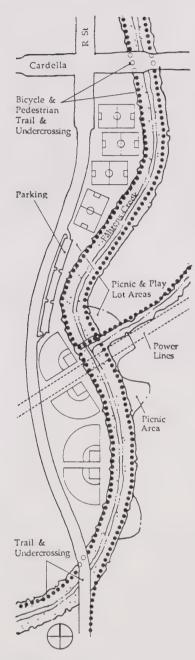
Various types of parks and plazas can be designed for Villages and Surrounding Areas to establish an identity or character for each neighborhood. For example, plazas in commercial Core areas may be most appropriately designed with finished pavement materials such as stone or brick, and include fountains and seating areas; parks in residential areas could be developed with grassy fields, play equipment, and sports facilities. Parks should be located and designed to take advantage of view corridors along streets to create a legible and memorable street pattern. Parks may also be used to slow traffic along local and connector streets. Private open space amenities may not count towards village park acreage requirements.

Justification:

The design of parks and plazas should be appropriate to their setting, location, and use. Because parks and plazas will be focal points of Village and Surrounding Area activity, special consideration should be given to making these public spaces not only functionally appropriate, but consistent with the character and density of the surrounding area.

Guideline 11D:

COMMUNITY PARKS



Fahrens Creek Community Park Schematic Design

Community parks should be a minimum or 18 acres in size and distributed across the growth area. There should be at least 1.5 acres of community park provided per 1000 residents.

Explanation

Community parks are major recreation facilities and contain many ballfields, playlots, picnic opportunities and other facilities. They must be located along a greenway and should be at the junction of two greenways when possible. Greenways, streets and landscaping should be used to minimize and buffer residences from the noise and nighttime lighting associated with ballfields.

Overall, 1.5 acres of community park should be provided per 1000 residents. Their approximate size and distribution are indicated in the Conceptual Land Use Plan. Their precise size and configuration should be determined by the City in association with property owners.

Iustification

Community parks offer important opportunities for organized sports, group picnics and informal recreation. At build-out the growth area will need several community parks to serve its residents. By locating these parks along greenways, residents can arrive at these parks easily on foot or by bicycle, thereby reducing reliance on the automobile and permitting young people, who cannot drive, to reach these parks safely and conveniently.

Guideline 11E:

VILLAGE PARKS

Village parks are located within Villages and should be 2 to 4 acres. At least 3.5 acres of village park should be provided per 1000 village residents. "Village greens" should be located between Core Commercial areas and village residential areas, and may be used to meet village park acreage requirements.

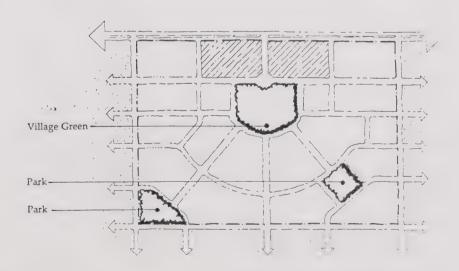
Explanation

Village parks are fundamental features of livable and enjoyable higher density neighborhoods. Village park sites should reinforce retail and residential areas by creating "town squares" suitable for informal gatherings, public events, as well as recreation. Village parks should create a formal focus in villages

Village greens are a special category of village park. Village greens should be located between Core Commercial and village residential areas, away from arterial streets. Public facilities such as day care, libraries, community centers and post offices should be developed within or immediately across from village greens when possible.

<u>Justification</u>

Village parks offer neighborhood meeting places, recreation activity centers and lunchtime picnic spots within a high concentration of residents and employees, thereby improving their quality of life and reducing their reliance on the automobile. These parks will also help establish the community identity for new villages, especially with the provision of civic buildings.



Village parks provide nearby recreation opportunities and reinforce the special identity of each Village.

Guideline 11F:

SECONDARY AREA NEIGHBORHOOD PARKS

Surrounding Areas should be served by two kinds of neighborhood parks: school parks (5-10 acres) and Surrounding Area neighborhood parks (4-6 acres). These parks should be distributed so most areas are less than one-eighth of a mile from any park. Within any square mile quadrant bound by arterial roads, a total of 3.5 acres of neighborhood parks (including school parks and other Surrounding Area neighborhood parks) should be provided in Surrounding Areas per 1000 Surrounding Area residents.

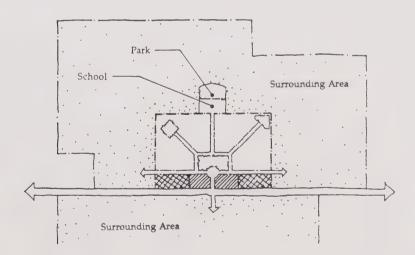
Explanation

A 5 to 10 acre neighborhood park should be associated with each elementary and Junior high school in the Surrounding Areas. These schools and school parks should be centrally located, placed at the edge of a Village and along a greenway, when possible.

4 to 6 acre neighborhood parks should be distributed to serve Surrounding Areas that would otherwise be more than one-eighth of a mile from a park. Adjacency with greenways is encouraged.

Justification

Neighborhood parks in Surrounding Areas offer important recreation opportunities close to home. If these parks are located along greenways, residents can arrive at these parks easily on foot or by bicycle, thereby reducing reliance on the automobile and permitting young people, who cannot drive, to reach these parks safely and easily.



Guideline 11G:

PARK AND PLAZA LANDSCAPING

Parks and plaza landscaping should provide adequate shading for comfortable mid-day summer use and sunny areas for winter use. Landscape design must respect vistas created by streets.

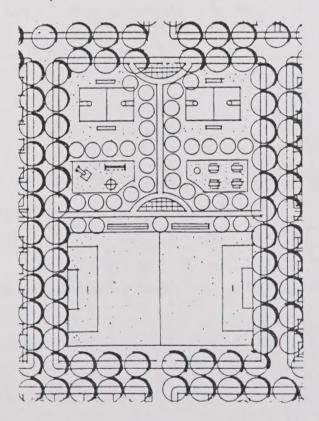
Explanation:

Park and plaza landscaping should provide trees and plants that make comfortable, relaxing environments. The amount and location of such landscaping should be appropriate to and complement the character and design of the space. Landscaping should allow comfortable use in both summer and winter months. Drought tolerant plants are encouraged.

Because parks and plazas form the spine of urban public spaces, views and linkages to streets and other public spaces and buildings must be respected and reinforced through design elements. For example, paths should align with important viewpoints; trees should not block views of significant public monuments or buildings; and perimeter landscaping should allow views into a park.

Justification:

Public park and plaza landscaping should create places that are comfortable, safe, and linked with the overall network of public spaces. Flexible landscaping guidelines should be permitted so that a variety of spaces are created which reflect the role and character of the place.



Guideline 11H:

NATURAL FEATURES AND SENSITIVE HABITATS

Major creeks, riparian habitat, significant woodlands, and other sensitive environmental features should be conserved as open space amenities, when feasible. Windrows and knolls should also be preserved. Fencing and piping of creeks should be avoided. Channelization improvements should be naturalized.

Explanation:

Whenever possible, yet in keeping with City standards and CEQA-required mitigation measures, major creeks, riparian habitat, significant woodlands and other environmental features should be incorporated into the design of Village and Surrounding Areas. Public access should be permitted, while important natural features and sensitive habitats are preserved. To permit contiguous development with sufficient density, it may be necessary to develop some areas containing vernal pools and marshes; on-site mitigation areas for these wetlands should be contiguous with existing wetlands or the open space network of parks and trails. The exact extent and quality of existing wetlands has not been ascertained, therefore site specific review will be required to assess biotic importance and development limitations.

Justification:

Natural features provide visual relief and a natural character for the growth area. These areas can also include trails and small picnic areas that serve Village and Surrounding Areas. Sensitive site planning should be encouraged so that natural habitats are protected and natural features becomes an integral part of the community.

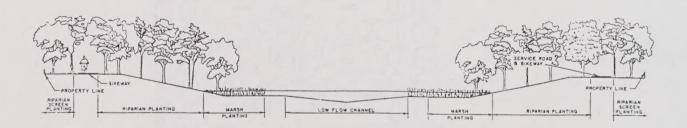


Illustration of naturalized channel section with bikeways.



